# Executive Summary

TRC was retained by Georgia Pacific Corporation (G-P) to perform a Phase I Environmental Site Assessment of the Georgia Pacific California Woods Products Manufacturing Division property located at 90 West Redwood Avenue in Fort Bragg, California (Figure 1) (Site). The property is an approximately 445-acre plot of land located along the coastline in the City of Fort Bragg. For the purposes of this study, TRC has divided the property into the following ten parcels: North Coast Zone (Parcel 1), Resaw Plant (Parcel 2), Industrial Parcel (Parcel 3), Power Plant Parcel (Parcel 4), Sawmill No. 1 (Parcel 5), Planner Parcel (Parcel 6), Sawmill No. 2 Parcel (Parcel 7), Log Storage Parcel (Parcel 8), Nursery Parcel (Parcel 9), and the South Coastal Zone (Parcel 10) (Figure 2). Each parcel was subsequently divided into smaller areas of interest based on observations made during Site reconnaissance activities.

The Scope of Services for the Phase I Environmental Site Assessment, prepared in accordance with ASTM E 1527-2000, included: a visual inspection of each parcel performed on April 24, 2001, August 11, 2002, September 12, 2002, October 16, 2002, and November 5, 2002; a site history survey including historical Sanborn maps, historical USGS maps, and aerial photograph review; a preliminary visual survey of the Parcel buildings for the presence of asbestos containing materials (ACM) and lead based paints (LBP); personal, telephone and written communication with local and county regulatory agencies; and a computer database search of sites with environmental concerns within a one mile radius of the Site.

In addition, TRC interviewed current and past G-P employees with historical operational knowledge of the Site. These employees include three previous plant managers, the current facility manager of environmental compliance, and three long term employees with operational knowledge of environmentally sensitive areas. The interviewed people represent several generations of residents who lived in Ft. Bragg and worked at the Sawmill.

The following paragraphs describe a Summary of our findings and recommendations specific to each parcel.

## Parcel 1

The area designated as Parcel 1, North Coastal Zone Parcel, is an approximately 62-acre plot of land located along the northwestern portion of the G-P facility. Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 1 was used as log storage. Parcel 1 was subsequently divided into six areas of interest (1.1 through 1.6) identified during site reconnaissance activities (Figure 3.1). The identified areas of interest in Parcel 1 are designated as glass beach No. 1, glass beach No. 2, soil stockpiles, pump house, fire water pond and glass beach No. 3.

The site reconnaissance activities of Parcel 1 revealed the following findings:

- The majority of Parcel 1 was used as log storage.
- Parcel 1 is currently under lease to Pacific Marine Farms.
- The presence of debris on the beaches, scrap metal, concrete retaining walls, areas of staining along the cliffs, and areas of melted debris fused with native rock formations was observed at Glass Beach Nos. 1, 2, and 3. The majority of debris on the beach consists of polished glass and is not considered an environmental concern. The areas of melted debris fused with native rock formations are generally located below the high tide line.
- The pump house, located on western portion of Parcel 1, constructed in the late 1950s, contains two diesel motors used to pump water from the fire water pond to the fire hydrants located on Parcel 1. Additionally, due to the date of construction, the pump house may contain lead based paint.
- Located outside of the pump house, in a concrete berm, is a 500-gallon diesel AST which provides fuel to the engines. No staining was observed in the concrete berm.
- The above ground pipes, which deliver the water to the fire hydrants, contain suspect ACM.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- The subsurface soils and groundwater above the high tide line, in the areas of Glass Beach Nos. 1, 2, and 3 should be investigated for metals and TPH, based on the accepted SHN Remedial Action Plan.
- Remove abandoned scrap metal on Glass Beach Nos. 1, 2, and 3.
- Due to the age of the Pump House, the surrounding area should be investigated for TPH as diesel.
- Perform survey of the insulation in piping for ACM.
- Perform lead based paint survey on pump house.

Parcel 2

The area designated as Parcel 2, Resaw Parcel, is an approximately 9-acre plot of land located on the northwestern portion of the G-P Facility. Parcel 2 is currently occupied

by a high ceiling wood warehouse divided into 4 areas, and vacant land (Figure 4.1). Historical photos and interviews suggest the building was constructed in phases between 1958 and 1963.

The site reconnaissance activities of Parcel 2 revealed the following findings:

- The majority of Parcel 2 was used as log storage until the early 1960s when the Dowel Loc structure was constructed.
- This parcel is currently under lease to Pacific Marine Farms which in turn has subleased this to several businesses.
- Suspect housekeeping practices were observed in the Parcel building. Staining was observed on concrete located inside Parcel buildings and outside breezeway and Storage Shed No. 2. Minor piles of debris were observed outside Dowel Loc.
- Due to the date of construction, a LBP was likely used on the Parcel facility.
- The above ground pipes, which deliver water to the fire hydrants, contain suspect ACM.
- A pole mounted transformer was observed on the Parcel.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate the following areas inside and surrounding the Parcel Building for metals, solvents, and petroleum hydrocarbons:
  - Inside Dowel Loc, breezeway, Storage Shed, and Glue Lam.
  - Debris piles in front of and south of Dowel Loc.
  - Staining located in open area east of breezeway.
  - Near former USTs located along Eastern end of Storage Shed No. 2
  - Staining located along Northern areas of Storage Shed No. 2
- Perform survey of insulation in piping for suspect ACM.
- Perform lead based paint survey on Parcel facility.

Parcel 3

The area designated as Parcel 3, Industrial Parcel, is an approximately 64-acre plot of land located along the northern portion of the G-P Facility. Parcel 3 was subsequently divided into sixteen areas of interest identified during site reconnaissance activities. The identified areas of interest in Parcel 3 are designated as Scrap Yard, Truck Loading Shed, Railroad Spurs, Yard Office, Planer No. 50, Former Planer No. 1, Air Compressor Pad, Dry Shed No. 4 and Dry Shed No. 5, Former Mobile Equipment Shop, Construction

Engineering, Kilns Area, Compressor House, Machine Shop, Sheet Metal/Plumbing and Plant Supply, Training Center, and Covered Shed (Figure 5.1).

The Site reconnaissance activities of Parcel 3 revealed the following findings:

- The Scrap Yard has been in existence since approximately 1995. Various debris were present during site reconnaissance in the Scrap Yard area, at the cliff edge and in the surf below. Observed debris includes metal and plastic materials, engine blocks and transformer pieces. The debris has since been removed from this area during site closure.

- Railroad spurs adjacent and west of Former Planer No.1 were used to load and unload rail cars. Locomotives resided along these railroad spurs to unhook and hookup with the railcars.

- The Yard Office was constructed in the mid-1950s. Due to construction date, building materials (including floor tiles) are suspect ACM. In addition, paint is suspected to be lead based.

- Planer No. 50 was constructed in the late 1950s to early 1960s. Due to the date of construction date, building materials are suspect ACM and paint is suspected to be lead based. An overhead transformer was observed outside the southeast corner of the building.

- Former Planer No. 1 was constructed prior to early 1950s and demolished in late 1990s. Stained sand and stained wood was observed in two concrete lined sand equipment foundations in the northeast area.

- A former oil drum storage containment is located in the southeast corner of Former Planer No.1. Standing liquid with minor petroleum odor was observed in concrete containment during site reconnaissance.

- Two concrete transformer pads (each containing three transformers) are located along the northern side of Former Planer No. 1. An overhead transformer was observed in the southwest corner of Former Planer No. 1 and overhead transformers were previously located at the southeast corner.

- Staining was observed on a concrete pad, located southeast of Planer No. 50, which formerly contained an air compressor. G-P personnel were unaware of the date of pad construction and period of compressor usage.

- Dry Shed No. 4 was constructed prior to the early 1950s (west portion) and extended in 1978 (east portion). Paint is suspected to be lead based. G-P personnel indicated the northwest corner was used to store transformers in an open shed on a dirt floor prior to the early 1990s.

- A wood preservative dip tank set into the ground, located outside the northwest corner of Dry Shed No. 4, was abandoned in place.

- Dry Shed No. 5 was constructed prior to early 1950s and may contain lead based paint.

- Currently undeveloped, a Mobile Equipment Shop (two buildings) was located in the northeast corner of Parcel 3, constructed in the late 1960s to early 1970s and demolished in late 1980s to early 1990s. The buildings were used for automobile and equipment repair, fuel dispensing, equipment storage and equipment wash. A catch basin and concrete sump were observed with standing liquid during site reconnaissance. Surface staining was observed in the area. In addition, a metal pipe protruding from the south building foundation ran along the ground for a short distance. Discolored soil with hydrocarbon odor was observed in the end of the pipe. Additional information and pipe history was unknown to G-P personnel.

- Railroad mechanical operations are located offsite and adjacent to the area east of the Former Mobile Equipment Shop.

- Construction Engineering building was built in the mid-1950s and consists of storage areas and offices. Based on site reconnaissance and document review, materials currently and/or previously stored in Construction Engineering include metal parts, various equipment, tools, small transformers, paint, thinners, enamels, solvents. Several 5-gallon buckets without lids were observed during site reconnaissance containing substances unknown to G-P personnel. Due to the date of construction, the building may contain suspect ACM in building materials (including tiles) and lead based paint.

- Review of site documentation indicate used paint thinner was stored in the portable shed located west of Construction Engineering.

- Buildings associated with the Kilns were constructed in the 1950s. Suspect ACM was observed in steam pipe insulation. Due to the date of construction, the buildings may contain lead based paint. Transformer boxes were observed on the south side of the kilns. A lube oil storage shed is located between the kiln buildings.

- Large air compressors, associated equipment, and oil are located in the Compressor House 1 and Compressor House 2. Staining was observed around the air compressors and around drums of oil in both buildings. Staining on the dirt was observed underneath the backup air compressor located outside Compressor House 1. Three overhead transformers were observed south of Compressor House 2. Because construction dates of the buildings are unknown, paint is suspected to be lead based.

- The Machine Shop was rebuilt after a fire demolished the original building in 1908. Substances used/stored in the Machine Shop include lube oil, used oil, heating coolant, paint, petroleum solvent, pressurized oxygen and pressurized acetylene. The wood floor was replaced with concrete in 1950s. Dark staining was observed in various areas inside the Machine Shop and a small sump filled with adsorbent pads was located in the center of the floor. G-P personnel indicated the sump (no longer in use) previously used to drain directly to the ground. Due to the date of construction, the building may contain lead based paint. Insulation on steam pipes are suspect ACM.

- A concrete-based storage shed outside the Machine Shop houses containers of used oil.

- Dark staining was observed outside the Machine Shop on the southwest corner of the building and at a location along the north side of the Sheet Metal/Plumbing building. G-P personnel explained the staining was oil blown out of the compressed air line due to clogging.

- The Sheet Metal/Plumbing and Plant Supply building was constructed around 1978. Cracks and staining were observed in various floor areas of the Sheet Metal/Plumbing portion of the building. Staining was observed around a metal container with oil. Review of site documentation revealed previous storage of petroleum solvents in this area.

- Review of site documentation indicate the storage of 2,500 gallons of lubricant stored in 55-gallon drums and storage of 110 gallons of paint thinner waste in the area of the Covered Shed. It is unclear if the storage was within the Covered Shed.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate Scrap Yard area for debris-related contaminants including metals, PCBs, petroleum hydrocarbons and VOCs.

- Investigate railroad spurs for hydrocarbons, metals, and SVOCs from locomotives and railroad ties.

- Investigate the soils at the overhead transformer area at southeast corner of Planer No. 50 for possible PCBs.

- Remove the stained sand and wood from the equipment foundations at Former Planer No. 1. Investigate the soil below the foundations for solvents.

- Characterize and remove (i.e., dispose of) residual liquid in former oil drum storage containment and investigate soils around and underneath the containment at the southeast corner of Former Planer No. 1.

- Investigate the soils for PCBs around and underneath transformer pads along the northern side of Former Planer No. 1 and at the former overhead transformer location in the southeast corner.

- Investigate northwest corner of Dry Shed No. 4 where transformers were previously stored for possible presence of PCBs.

- Investigate outside the northwest corner of Dry Shed No. 4 at the dip tank for possible presence of SVOCs.

- Characterize and remove (i.e., dispose of) residual liquid in the catch basin and concrete sump at the Former Mobile Equipment Shop area. Also investigate soils in the area and underneath existing building foundations and piping with hydrocarbon odors for PCBs, VOCs and petroleum hydrocarbons.

- Investigate soils east of the Former Mobile Equipment Shop for possible petroleum hydrocarbons.

- Investigate Construction Engineering storage areas related to paint, thinners, solvents, PCBs, petroleum hydrocarbons and metals.

- Investigate portable shed by Construction Engineering previously used for storing used paint thinner for solvents and petroleum hydrocarbons.

- Investigate soils around and underneath transformer boxes south of the kilns for possible presence of PCBs.

- Investigate Compressor House area for hydrocarbons and PCBs, and soils underneath overhead transformer (south of Compressor House) for presence of PCBs.

- Investigate Machine Shop, nearby shed, Sheet Metal/Plumbing, and Covered Shed for solvents and petroleum hydrocarbons.

- Perform survey for ACM on building materials in Planer No. 50, tiles and building materials in Yard Office, tiles and building materials in Construction Engineering, insulation on steam pipes, and building materials in Kilns, Kiln Office, and Machine Shop.

- Perform lead based paint survey on Truck Loading Shed, Planer No. 50, Dry Shed No. 4, Dry Shed No. 5, Yard Office, Construction Engineering, Kilns, Kiln Office, Compressor House, and Machine Shop.

Parcel 4

The area designated as Parcel 4, Power House, is an approximately 12.5-acre plot of land located along the eastern portion of the G-P Facility. Parcel 4 was subsequently divided into thirteen areas of interest identified during site reconnaissance activities. The identified areas of interest in Parcel 4 are designated as Power House Fuel Storage, Former Bunker Fuel ASTs, Water Treatment Plant, North Settling Pond, Collection Pond, South Settling Pond, Fuel Barn, Power House, Transformers, Oil Storage Shed, Press Building, Cooling Towers, and Log Pond (Figure 6.1).

The Site reconnaissance activities of Parcel 4 revealed the following findings:

- Scrubber effluent was pumped to the South Settling Pond in the south area of Parcel 4. According to interviews and document review, scrubber effluent contains detectable levels of cyanide. During site assessment, a sheen was observed in the east and west ends of the South Settling Pond. There is potential for sediments to contain cyanide.

- In the past, wet fly ash was transported to the North Settling Pond for dewatering. Detectable levels of cyanide and metals have been identified in fly ash.

- According to plant personnel, the Collection Pond is a natural low-spot that collects site storm water. There is a potential for stormwater sediments to contain petroleum hydrocarbons, cyanide, and metals form other area in and around Parcel 4.

- The Log Pond is part of the treatment process for the scrubber effluent. According to interviews and document review, scrubber effluent contains detectable levels of cyanide. There is potential for the pond sediments to contain cyanide and metals.

- The water treatment plant was constructed in the mid-1970s. During operation, the water treatment plant stores and uses chemicals to prevent cooling tower water from corrosion and scaling. Floor staining was observed around air compressors and the treatment tanks on concrete floors. Due to the concrete floor and the nature of the chemicals used at the water treatment plant, it is highly unlikely for the soils underneath to have been impacted as a result of site operations.

- A hydraulic unit building (for the chip truck dump ramp) is located southeast of the water treatment tanks. Soils underneath and around the hydraulic unit building may be impacted by petroleum hydrocarbons from hydraulic oil.

- The Press Building previously housed a sugar cane press to dewater wood fuel. An air compressor and 55-gallon drums of diala oil are located in the Press

Building. Staining was observed on the concrete around the former press location and air compressor.

- The Cooling Towers were constructed in the current location in the mid-1970s. Various chemicals associated with water treatment are stored outside the east side of the Cooling Towers. These chemicals are fairly innocuous and should not pose a concern. Historically the cooling towers were located west of the Log Pond. and water treatment chemicals containing chromium compounds may have been used at that time

- An oil storage shed is located on the north side of the Power House. During site reconnaissance, residual liquid was observed in the secondary containment area. There is potential for leakage of oil from the secondary containment to the ground below.

- A small wood shed south of the Power House contains paint storage. Staining on the concrete floor from paint was evident. There is potential for leakage to soils underneath the shed.

- The Power House Fuel Storage is a shed constructed in 1995 housing three 10,000-gallon tanks in concrete secondary containment. The tanks hold reserve fuel for the Power House. In May 1999, approximately 4,000 gallons of fuel spilled entirely within the secondary containment and was subsequently cleaned up. Soils underneath secondary containment may be impacted with petroleum hydrocarbons.

- Two steel ASTs (20,000- and 25,000-gallon capacity) containing bunker fuel were in operation from 1950s to 1996 south of the power house fuel storage. Plant personnel recall the steel ASTs in concrete secondary containment that was cracked. Plant personnel indicate underground piping associated with the bunker fuel remain in place. Bunker fuel was transported via rail car and plant personnel are unaware if the railroad tracks still exist in that location. Soils underneath and around the former bunker fuel ASTs and railroad tracks may be impacted with petroleum hydrocarbons.

- Various chemicals have been stored in several areas of the Power House. Two hydraulic units are located near the boilers. Six tanks containing turbine oil and lubricating oil are located in the Power House. The Power House may contain suspect ACM and lead based paint. Some older switches in the Power House may contain mercury. These switches should be identified and removed prior to plant demolition.

- A large transformer pad is located on the north side of the Power House. Other ground transformers are located next to the oil storage shed, outside the south side of the Power House, and inside the water treatment plant. Three overhead

transformers are located west of the South Settling Pond. Due to the age of the plant, soil in the vicinity of the transformers may be impacted with PCBs.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate sediments in and around the Log Pond for possible metals and cyanide.

- Investigate the following areas for possible petroleum hydrocarbons:
  - Power House Fuel Storage
  - Former Bunker Fuel ASTs and associated railroad track area
  - Piping from the Bunker Fuel ASTs to the Power Plant
  - Collection Pond
  - South Settling Pond
  - Press Building
  - Hydraulic Unit Building
  - Oil Storage Shed

- Investigated the soils surrounding the current and former cooling towers for presence of chromium compounds**.**

- Investigate areas surrounding transformer pad, other transformers on the ground, and overhead transformers for possible PCBs.

- Characterize soils and sludge for metals and solvents in the following area:
  - Power House

- Investigate soils around and underneath Paint Storage Shed for solvents.

- Perform lead based paint and ACM survey on the Water Treatment Plant, Power House, Fuel Barn, and Hydraulic Unit Building.

- Investigate presence of tracks and piping in the former Bunker Fuel area to locate the track and the fuel and piping and investigate for the presence of petroleum hydorcarbons.

<u>Parcel 5</u>

The area designated as Parcel 5, Sawmill No. 1, is an approximately 21-acre plot of land located along the eastern portion of the G-P Facility. Parcel 5 was subsequently divided into thirteen areas of interest identified during site reconnaissance activities. The identified areas of interest in Parcel 5 are designated as Sawmill No. 1, Log Pond, old diesel concrete pad, underground lines to fuel area, area west of Mobile Equipment Shop, transformer pad, possible old diesel AST location, Washdown Building, Tire Shop,

Mobile Equipment Shop, Fuel Storage and Dispenser Building, the Service Station and office buildings (Figure 7.1).

The Site reconnaissance activities of Parcel 5 revealed the following findings:

- Sawmill No. 1 was demolished in 1998. TRC performed a preliminary investigation to evaluate coatings on selected buildings and to determine if contaminants associated with prior Site operations are present in the subsurface soils in the area. The lead survey report found that paint chips and debris generated during building demolition were not likely to contain hazardous levels of lead. No soil samples analyzed contained detectable levels of PCBs. Elevated concentration of TPH as diesel and TPH as motor oil were found in soils under the concrete foundation of Sawmill No. 1 and one uncovered boring southwest of Sawmill No. 1. TRC recommended leaving the building floor intact to prevent contact of soils with the surface water and further assessment of the area southwest of Sawmill No. 1.

The Log Pond is used as part of the treatment process for the scrubber effluent. According to plant personnel interviews and agency documents the scrubber effluent contains detectable concentrations of cyanide.

- Eastern and western portion of the Log Pond appears to have been filled in the 1960s and 1970s. Source of the fill materials is not known.

- According to G-P personnel, a concrete pad observed on the northwest corner of the Mobile Equipment Shop, was once a diesel dispenser.

- Underground pipes, which supply fuel for the Mobile Equipment Shop, are located to the west of the Mobile Equipment Shop and connect to the Fuel Storage and Dispenser Building. The underground pipes are double contained and are connected to a fuel leak detection system.

- According to G-P personnel a diesel AST was located in the area west of the Mobile Equipment Shop. Additionally, plant personnel indicated that historically some minor petroleum hydrocarbon spills may have occurred in the same area.

- A transformer pad was observed in the area of the small pond and an overhead transformer was observed east of the Fuel Storage and Dispenser Building.

- Review of historical aerial photographs indicated that a different structure previously occupied the area which is now the Tire Shop Building.

- Sludge was observed within the sumps and concrete trench behind the structure. Some minor soil staining was observed in the vicinity of the 5,000-gallon water treatment AST.

- Sludge was observed within the dispenser island concrete trenches in the Fuel Storage and Dispenser Building.

- The Mobile Equipment Shop was constructed in the late 1940s, but G-P personnel were unsure as to the date the concrete floor was poured. Suspected ACM was observed in steam pipes insulation and floor tiles. Due to the date of construction the building may contain lead based paint. Sludge was observed in the oil change pit and another pit located outside on the south end of the building. A pit covered by large wood planks is located in the north west portion of the building. Staining was observed on the concrete floor in the north shed, west shed, and west and southwest portion of the structure.

- The offices located along Highway One were constructed between the late 1950s and the early 1970s and potentially contain ACM and lead based paints.

- The Walsh Oil One Stop Service Station, located at 105 South Main Street, has been in operation since the early 1960s. Three monitoring wells are currently on-site and are sampled on a quarterly basis. The groundwater flow is historically to the southwest. Benzene and MTBE concentrations are below laboratory detection limits. The highest concentration of TPH as gasoline is 220 µg/L (MW-3). The Regional Water Quality Control Board – North Coast Region typically enforces Maximum Contaminant Level (MCLs) concentrations as clean-up goals for LUST sites in this region. The MCL for TPH-G is 500 ppb to 1,000 ppb, per the San Francisco Bay Basin Plan.

- Sanborn Maps identified an area to the east of the old shingle mill as "open refuse fire" and an area to the west of the old boarding house as an oil house.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate areas identified in TRC's *Report of Findings Preliminary Investigation Demolition Support Services (southwest of Sawmill No. 1),* for possible diesel and motor oil impacted areas.

- Investigate sediments in and around log pond for possible metals and cyanide impacted areas.

- Investigate the fill material east of the log pond.

- Investigate the following areas for possible petroleum hydrocarbons:
  - Around the underground piping
  - Fuel Storage and Dispenser Building
  - Former diesel dispenser concrete pad
  - 5,000-gallon water treatment AST
  - West of Mobile Equipment Shop
  - West of the old boarding house, marked as an oil house on the Sanborn maps

- Investigate areas surrounding transformer pad and overhead transformer for possible PCBs.

- Characterize soils and sludge in the following areas:
  - Washdown building
  - Mobile Equipment Shop
  - Fuel Storage and Dispenser Building

- Investigate soils around and underneath Mobile Equipment Shop for metals, solvents, and petroleum hydrocarbons.

- Investigate area east of old shingle mill, identified as "open refuse fire" on Sanborn maps, for metals and petroleum hydrocarbons.

- Investigate area surrounding Tire Shop for *petroleum hydrocarbons.*

- Perform survey for ACM on insulation in steam pipes, Mobile Equipment Shop tiles, and office buildings.

- Perform lead based paint survey on Mobile Equipment and office buildings.

Parcel 6

The area designated as Parcel 6, Planer Parcel, is a 25-acre plot of land located along the northern portion of the Georgia Pacific facility. Parcel 6 was subsequently divided into five areas of interest (6.1 through 6.5) identified during site reconnaissance activities (Figure 8.1). The identified areas of interest in Parcel 6 are designated as Former Cooling Towers Location, Planer Mill No. 2, Lumber Storage, Shipping Office, and Parking Areas.

The Site reconnaissance activities of Parcel 6 revealed the following findings:

- Planer Mill No. 2 was constructed in two parts: the north section in the 1950s and the remaining larger section in the late 1960s to early 1970s. Hydraulic units are located in the east and west areas of the building. Several hydraulic oil ASTs are located throughout the facility. In addition, lube oil and hydraulic oil are stored in the central portion of the facility. Areas of oil storage may be impacted with petroleum hydrocarbons.

- An air compressor is located in the central area of Planer Mill No. 2. Surface staining was evident around the air compressor and soils underneath may be impacted with petroleum hydrocarbons.

- The central area of Planer Mill No. 2 contains parts storage. Old motors and pieces of transformers were observed in this area. This area may be impacted by

petroleum hydrocarbons from the motors and PCBs from the transformers (date unknown).

- Empty oil drums are stored outside the central area of Planer Mill No. 2. Surface staining was observed on the concrete and soil in this area. Stained areas may be impacted with petroleum hydrocarbons.

- Review of site documentation revealed a hazardous waste storage room in the northwest corner of Planer Mill No. 2. Materials stored in this area include waste oil, absorbents, used paint thinners, saw grindings, and PCB-contaminated oil and asbestos. According to plant personnel, hazardous waste was stored at that location in the 1990s and the room is currently used to store emergency response equipment. The hazardous waste storage area may be impacted with petroleum hydrocarbons, solvents, and PCBs.

- The Shipping Office was constructed in the mid-1990s. A vehicle maintenance shop was previously located at the current Shipping Office location from the early 1960s until the 1980s. Plant personnel recalled a fuel pump and fuel tank at or near the vehicle maintenance shop. An undated site map discovered during site document review indicates a 25,000 gallon diesel AST located northeast of the vehicle maintenance shop. Soils in and around the former vehicle maintenance shop and diesel AST may be impacted with petroleum hydrocarbons.

- Vehicle parking is located on the east portion of Parcel 6. Aerial photographs indicate vehicle parking in this area since the late 1950s.

- Electrical transformers were observed in the central area of Planer No. 2 (one large transformer) and one overhead transformer located in the southeast area of Parcel 6 (east of the Shipping Office and west of the parking areas). Review of site documentation indicate overhead transformers were previously located north of the former storage shed and northwest of Planer Mill No. 2 and ground transformers were previously located in the Planer Mill No. 2 and at the vehicle maintenance shop. Due to the age of the facility, the soil in the vicinity of the transformers may be impacted with PCBs.

- Based on the construction date, Planer Mill No. 2 may contain suspect ACM and lead based paint.

- Western portion of the log pond was located in parcel 6. This area appears to have been filled in the 1970s. Source of the fill materials is not kown.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate former hazardous waste storage area for petroleum hydrocarbons, solvents, and PCBs.

- Investigate the following areas for possible petroleum hydrocarbons:
  - Hydraulic oil ASTs in Planer Mill No. 2
  - Central area of Planer Mill No. 2 storing old motors, lube oil and hydraulic oil
  - Surface staining outside the central area of Planer Mill No. 2
  - Former vehicle maintenance shop location
  - Former diesel AST location

- Investigate soils in the vicinity of transformers for PCBs at the following locations:
  - Central area of Planer Mill No. 2
  - Northwest of Planer Mill No. 2
  - North of former storage shed
  - Southeast area of Parcel 6 (east of Shipping Office and west of parking areas)
  - Former vehicle maintenance shop location

- Perform asbestos and lead based paint survey on Planer Mill No. 2.
- Investigate the soils in the fill area west of the Log Pond.

Parcel 7

The area designated as Parcel 7, Sawmill No. 2 Parcel, is an approximately 35-acre plot of land located in the southern part of the G-P Facility. Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 7 was either covered by vegetation or used for lumber storage. Parcel 7 was subsequently divided into four areas of interest (7.1 through 7.4) identified during site reconnaissance activities (Figure 9.1). The identified areas of interest in Parcel 7 are designated as Sawmill No. 2, South Ponds, Sediment Drying area, and Scale House.

The site reconnaissance activities of Parcel 7 revealed the following findings:

- The majority of Parcel 7 was historically either unused vacant land, or used for lumber storage.

- Western most portion of Sawmill No. 2 was constructed in the early 1960's and no changes were made until early 1980s. In the late 1980s, the southern most part of the building was added. In the early 1990s, a sorter building was added south east of the Sawmill No. 2 building**.**

- Two Hazardous materials/waste oil storage locations were observed within the Sawmill No. 2 Building. Staining was observed on the ground in these areas.

- Large electrical transformers were observed in two areas north of the Sawmill No. 2 building on a concrete/asphalt pad. According to plant personnel, these transformers have been present since plant construction.

There is potential for soil near the transformers to have been impacted with PCBs. An additional transformer was observed in the open area between Sawmill No. 2 and the sorter building. This transformer was installed in the early 1990s on a concrete pad. Due to the age of this transformer, it is unlikely for the soils in this area to have been impacted from past operations.

- An estimated 100 cubic yard stockpile of soil was observed west of the Sawmill No. 2. Plant personnel indicated that the stockpile was generated during fuel tank removal activities. This stockpile is potentially impacted with petroleum hydrocarbons.

- Hydraulic oil storage areas were observed within the Sawmill No. 2 building and the sorter building. These oil storage areas were secondarily contained and provide hydraulic oil for the conveyors. Although staining was observed on the concrete floor, containment appeared to be in good shape. It is highly unlikely for the soil underneath the containment to have been impacted from site operations.

- According to plant personnel, TP burner and diesel fuel ASTs were historically located between the Sawmill and the Sorter Buildings. There is potential for soil in these areas to have been impacted with TPH and PAHs

- The scrubber effluent from the Power House (Parcel 4) discharges to a settling pond on the south side of Parcel 7. The water from this pond is then discharged to the Aeration Pond. Aeration Pond is connected to two additional ponds and the discharge diverts back to the western end of the Log Pond. There is potential for presence of cyanide in the sediments in the ponds.

- The sediments in the settling pond and aeration pond are removed and allowed to dry in a dewatering area, east of the aeration pond. Once dry, the sediments are sent offsite for soil amendment at McGuires Ranch.

- The eastern most edge of Parcel 7 is a wooded area. Four (4) wells were observed on the western edge of this area. These wells should be properly abandoned to prevent possible migration of surface runoff to the groundwater table.

- The Scale House building and the western portion of the Sawmill No. 2 building contains suspect ACM in the flooring and building materials.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations regarding Parcel 7:

- Investigate the soil in the hazardous materials storage areas within Sawmill No. 2 building for presence of solvents, PCBs, and TPH as diesel.

- Investigate the soil in the former diesel AST and TP burner area between the Sawmill and Sorter Building.

- Investigate the surface soil in the areas near transformer pads north of the Sawmill No. 2 for presence of PCBs.

- Collect sediment samples from the ponds for presence of cyanide.

- Abandon the wells observed on the western side of the wooded areas.

- Collect soil samples from the stockpile west of Sawmill No. 2.

- Perform surveys of lead based paint and ACM for the Scale House and the western end of the Sawmill No. 2 building.

Parcel 8

The area designated as Parcel 8, Log Storage Parcel, is an approximately 129-acre plot of land located along the southwestern portion of the G-P Facility. Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 8 was used as log storage. Parcel 8 was subsequently divided into four areas of interest (8.1 through 8.4) identified during site reconnaissance activities (Figure 10.1). The identified areas of interest in Parcel 8 are designated as fueling area for planes (south end of the airstrip), disturbance along coastal region (near cemetery), clinker piles, and the "sheep barn".

The site reconnaissance activities of Parcel 8 revealed the following findings:

- The majority of Parcel 8 was used as lumber and log storage.

- The airstrip was constructed between 1941 and 1952 and was in operation until the late 1980s. Near the south end of the airstrip is a small 100-foot by 100-foot area which was used as a fueling area for airplanes.

- During review of historical aerial photographs large disturbed areas were noted along the coastline near the cemetery.

- According to plant personnel, based on hearsay, old transformers were allegedly buried in the former Sheep Barn area.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate the airstrip fueling area, clinker piles, and the disturbed areas (as identified in historical aerial photographs) for metals, TPH as diesel, and TPH as motor oil. The investigation can be performed by trenching through the identified areas and collecting representative soil samples while logging visual findings.

- Conduct a geophysical survey of the Sheep Barn Area to investigate the presence of alleged transformers. Should the geophysical survey identify subsurface anomalies, they will be investigated further through trenching activities.

- Conduct a geophysical survey of the disturbed areas to identify presence of buried railroad tracks. In the event railroad tracks are found to be present, additional investigation of the soil adjacent to railroad tracks should be conducted for presence of TPH, metals, and PAH's.

Parcel 9

The area designated as Parcel 9, Nursery Parcel, is an approximately 15-acre plot of land located along the southeastern portion of the G-P Facility. Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 9 was not utilized for the sawmill operations until the early 1970s when the tree nursery was built. Parcel 9 was subsequently divided into two areas of interest (9.1 and 9.2) identified during site reconnaissance activities (Figure 11.1). The identified areas of interest in Parcel 9 are designated as the Tree Nursery Area and the Scrap Metal Area.

The site reconnaissance activities of Parcel 9 revealed the following findings:

- Parcel 9 was largely undisturbed by early sawmill activities.

- Three of the five greenhouses had no flooring until 1993.

- Insecticides, herbicides, and fungicides have been stored and used on Parcel 9 since the early 1970s.

- According to G-P personnel, large scrap metal piles have historically been stored on Parcel 9.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate under the flooring and around the structures of the following Tree Nursery Areas for insecticides, herbicides, and fungicides:
  - The five greenhouses
  - The main packing shed

- Chemical storage shed
- Chemical mixing shed
- Water filtration and purifier system
- Pump house and holding tank

- Investigate the pump house area for petroleum hydrocarbons.

- Investigate the Scrap Metal Area for metals, solvents, and petroleum hydrocarbons.

- Perform a LBP survey on main packing shed and mixing shed.

Parcel 10

The area designated as Parcel 10, South Coastal Zone Parcel, is an approximately 58-acre plot of land located along the southwestern portion of the G-P Facility. Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 10 was not utilized for the sawmill operations. However scrapings from the log storage area were apparently pushed in an area north of the blowhole. This area consists of fill to depths ranging from 5 to 15 feet. Parcel 10 was subsequently divided into two areas of interest (10.1 and 10.2) identified during site reconnaissance activities (Figure 12.1). The identified areas of interest in Parcel 10 are designated as clinker and ash/scrap piles and the fill area.

The site reconnaissance activities of Parcel 10 revealed the following findings:

- Parcel 10 was largely undisturbed by early sawmill activities.

- The presence of debris in the blowhole and along the cliff line, abandoned metal debris, stained cliffs, and a small area of melted debris fused with the native rock formation was observed along the area identified as disturbed in historical aerial photographs.

- Fill was observed to have been placed in the area north of the blowhole.

- Large clinker and ash/scrap piles were observed on the northeast portion of Parcel 10.

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate the blowhole area, the clinker and ash/scrap piles, and the disturbed areas (as identified in historical aerial photographs) for metals, TPH as diesel, and TPH as motor oil and PCBs. The investigation can be performed by potholing through the identified areas and collecting representative soil samples while logging visual findings.

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Figures

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Appendices

## 1.0 INTRODUCTION

TRC was retained by Georgia Pacific Corporation (G-P) to perform a Phase I Environmental Site Assessment of the Georgia Pacific California Woods Products Manufacturing Division property located at 90 West Redwood Avenue in Fort Bragg, California (the Site) (Figure 1). The phase I activities are part of the closure procedures G-P has implemented to ensure that the environmental concerns associated with past facility operations are addressed to allow for future development of the site.

The property is an approximately 445-acre plot of land located along the coastline in the City of Fort Bragg. In an effort to provide a more comprehensive and detailed assessment of the entire property and the current and historical operations which occurred specific to each area of the Site, TRC has divided the property into ten parcels (Figure 2). Each parcel was subsequently divided into smaller areas of interest based on observations made during Site reconnaissance activities.

The assessment of each parcel was performed between August and November 2002, pursuant to the requirements set forth in ASTM E 1527-2000. The Scope of Work for each parcel included: a visual inspection of the buildings and grounds, a site history survey including historical Sanborn maps, historical USGS maps, and aerial photograph review; personal, telephone and written communication with local and county regulatory agencies; a preliminary visual survey of the Parcel buildings for the presence of asbestos containing materials (ACM) and lead based paints (LBP); and a computer database search of sites with environmental concerns within a one mile radius of the Site.

Each assessment will address environmental concerns in regards to the specified parcel, as described above. Section 2 describes the Site in terms of location and geologic make-up, Site operations, and contains the computer database search of sites with environmental concerns within a one-mile radius of the Site. Sections 3 through 12 will relate information gathered about the specified parcel in the course of the site visit, interviews, aerial photograph reviews, historical map reviews, information gathered during the course of conversations and correspondence with county and local regulatory agencies and TRC's findings and recommendations.

# 2.0 SITE DESCRIPTION

## 2.1 Regional Geology

Fort Bragg is located on the Northern California Pacific Coast within the Coast Range Geomorphic Province of Northern California. The regional geology consists of complexly folded, faulted, sheared and altered bedrock. The bedrock of the region is the Coastal Belt of the Franciscan Complex of Cretaceous to Tertiary (late Eocene) age (70 to 40 million years old). The Franciscan Complex is comprised of a variety of rock types. In the north coast region the Franciscan is divided into two units, the Coastal Belt and the Melange. In Mendocino County, the Franciscan Melange lies inland and is an older portion of the Complex, ranging in age from the Upper Jurassic to the late Cretaceous. The Coastal Belt consists predominantly of graywacke sandstone and shale.

This geologic province formed at the boundary between the North American and Pacific Crustal Plates. The contact between the North American and Pacific Plates is currently the San Andreas Fault Zone and subsidiary faults of the San Andreas Fault System. Relative to the project site, the San Andreas fault is located off-shore several miles. The Coastal Belt has undergone weak to intensive deformation which has included folding, uplifting, tilting, and overturning. Also of importance to the seismicity of the region is the Mendocino Triple Junction, the terminus of the San Andreas fault, which is located in the Cape Mendocino area to the north-northwest of Fort Bragg approximately 80 miles. This boundary represents the point at which the San Andreas fault, the Mendocino Fracture Zone and the Cascadia Subduction Zone meet. It is an extremely active tectonic and seismic zone and historic earthquakes have occurred frequently in the area.

Other geologic units present in Fort Bragg and the project vicinity include surface geologic units including deposits of beach and dune sands, alluvium, and marine terrace deposits. The most important of these for the project site are the marine terrace deposits of Pleistocene age which cut bedrock surfaces along the coast, and form much of the coastal bluff material overlying bedrock. The marine terrace deposits are massive, semi-consolidated clay, silt, sand and gravel, ranging from 1 to 140 feet in thickness.

## 2.2 Hydrogeology

The regional hydrogeologic setting of the Mendocino Coast has been presented in the *Mendocino County Coastal Ground Water Study,* first published in June 1982 by the State Department of Water Resources. The project site is located in the western coastal area of Mendocino County. This region is subdivided into five subunits in the coastal groundwater study, the Westport, Fort Bragg, Albion, Elk and Point Arena subunits, separated by the major rivers which discharge to the Pacific Ocean. The aerial extent of the coastal groundwater study included all areas in which coastal terrace deposits had been mapped. The project site is located within the Fort Bragg subunit, which extends from Big River on the south to Tenmile River on the north.

Fresh ground water is primarily obtained from shallow wells in the semi-consolidated marine terrace deposits, or through the municipal or privately-owned water systems. These water systems divert surface flow, springs or tap shallow alluvial aquifers. A combination of wells and surface water diversions is commonly necessary to insure adequate supply year-round.

The marine terrace deposits underlying the project site are dominantly silty sand, well graded sand, gravelly sand and gravel lenses.

## 2.3 Site Geology

The Franciscan bedrock of the Fort Bragg area is exposed primarily on the tops of ridges and sporadically on the moderately steep slopes and in creeks, rivers and ocean bluffs of the area. Sandstone and shale sea mounts are very common directly off-shore from the site.

Terrace deposits blanket the sea mounts and bluffs, with thicknesses varying from 2 to 3 feet to as much as 30 feet locally.

The bedrock is typically composed of graywacke or “dirty” sandstone which contains a significant percentage of silt and clay. Interbedded with the sandstones are siltstone and shale which are thinly bedded and laminated. Locally the sandstone bed thicknesses vary from 0.2 to 4 feet in thickness where interbedded siltstone and shale are present. These areas tend to be much weaker and do not form the pronounced 20 to 30 foot high sea mounts where bedding is very thick in the sandstone. These zones tend to produce inlets where marine terrace deposits are thicker and erosion is more prevalent.

Marine terrace deposits consist of silty sand, gravelly sand and lenses of gravel. Gravel lenses are frequently exposed at the base of nearly vertical banks of silty sand. In areas where a less steep slope, less than 40 degrees, has formed these sediments are heavily vegetated above the high tide zone.

The terrace deposits consist of silty sand deposits showing various degrees of weathering and decomposition in the upper 4 to 5 feet below bluff top. From about 5 feet below the top, the silty sand has an increasing concentration of fine gravel. Gravel lenses break the sand sequence at about 11 to 12 feet below the top of the bluff to the top of the bedrock surface which is variable.

Soils exposed at the site surface consist of sandy gravel fill soils lying between the asphalt pads and access roads. Underlying the asphalt and fill soils, soils consist of silty sands and well-graded sands, normally found in the Quaternary marine terrace deposits of the area. These sands tend to be loose to medium dense and dry to moist in the upper 8 to 10 feet below ground surface.

## 2.4 Location and Site Description

The G-P Ft. Bragg Facility is located along the coastline in the city of Fort Bragg, Mendocino County, California. The Site is located west of Highway One and is bounded to the south by Noyo Bay, open coastline to the north, the city of Fort Bragg to the east, and the Pacific Ocean to the west.

The Site is located on approximately 445 acres. For the purposes of this study, the Site has been divided into ten parcels by TRC (Figure 2). Each parcel has been assigned the following designations and has the corresponding area:

| Parcel No. | Name | Area (acres) |
|---|---|---|
| 1 | North Coast Zone | 62 |
| 2 | Resaw Plant | 9 |
| 3 | Industrial Parcel | 64 |
| 4 | Power Plant Parcel | 12.5 |
| 5 | Sawmill #1 | 21 |
| 6 | Planner Parcel | 25 |
| 7 | Sawmill No. 2 | 35 |
| 8 | Log Storage Parcel | 129 |
| 9 | Nursery Parcel | 15 |
| 10 | South Coastal Zone | 58 |

Figure 2 presents a map of the Georgia Pacific facility with the parcel designations. Based on site reconnaissance activities each parcel was further divided into identified areas of interest. Each Parcel and the associated identified areas of interest are discussed in further detail in their respective sections of the assessment report.

## 2.5 Description of Operations

According to historical records, the sawmill at Fort Bragg began operations in 1885. Georgia Pacific acquired the facility and began operations in 1973. On August 8, 2002, lumber production operations ceased at the facility. Prior to the plant closure, logs were received by truck, unloaded, and stored in the log storage areas. Logs were then removed from inventory, debarked, and milled. Milled lumber was then either shipped green, kiln dried, or air dried on site. Finished lumber was transported by rail or flatbed trailers. Bark and wood refuse were transported by truck, conveyer, or pneumatic system to the power plant where they were burned to generate steam for electricity.

According to documents reviewed during agency file reviews, the areas designated Parcel 1 and 2 were owned by Union Lumber Company. Title to the property was transferred from Union Lumber Company to Boise Cascade Lumber Company in 1969, and then to

Georgia Pacific Corporation in 1973. The property north of Parcel 1 was purchased by the William J. Blinn Trust in 1991.

Historically, the facility operations were conducted in the sawmills (No. 1 and No. 2), planner buildings, a fence plant, a power plant, lumber storage areas, and various maintenance facilities. Based on review of historical Sanborn maps, early facility operations occurred mainly on Parcels 4 and 5. Over the course of the 117 years of operations the facility has expanded to the current 445 acres. Parcel 4 contains the power plant which provided power. Parcels 1 and 8 were primarily utilized for finished lumber and raw log storage. Parcel 8 also contains an airstrip which has been out of operation since the late 1980s. Parcel 9 and 10 were largely unused for sawmill operations until recently when an operating nursery was established on the Parcel 9. Up until the mill's recent closure, mill operations occurred on Parcels 6 and 7, which contain the planner building and sawmill No. 2. Parcel 5 contains fueling and maintenance facilities for facility equipment. Until 1998 Parcel 5 also contained Sawmill No. 1. This sawmill ceased operations in 1998 and was demolished in 1999 and 2000. Parcel 2 is currently leased to Pacific Marine Farms, which plans to convert it to an abalone farm. This parcel historically contained a wood prefabrication plant utilized for railroad flatcars and fence posts. Parcel 3 contains the sheet metal shop, planer building, kilns, and priming and testing building, sorter building, and mobile equipment yard.

## 2.6 Site Visits and Interviews

Interviews with current and past G-P employees with historical knowledge of the site were conducted by TRC. G-P personnel interviewed included: Mr. Richard Benedetti, Mr. Doug Heitmeyer, Mr. Paul Johnson, Mr. Michael Woody, and Mr. Hugo Esquivel, employees of Georgia Pacific. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility and is currently retired. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years. Mr. Paul Johnson is a Fort Bragg resident and an employee of the Sawmill for approximately 40 years. Mr. Michael Woody is currently the West Coast Regional Environmental Resources Manager. Mr. Hugo Esquivel is currently a mechanic working at the G-P facility.

## 2.7 Sanborn Map Review

Historical Sanborn Maps were obtained from EDR. TRC received five Sanborn maps from the years 1898, 1909, 1919, and 1941, which contained coverage of portions of the G-P Facility. Observations made during review of the Sanborn Maps, regarding specific parcels, are discussed in each parcel's Sanborn Map section.

## 2.8 Historical Aerial Photographs Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. Observations made during review of the Aerial Photograph review, regarding specific parcels, are discussed in each parcel's Historical Aerial Photographs section.

## 2.9 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps covering the years 1943, 1960 (2), and 1978. Observations made during review of the Historical USGS Maps, regarding specific parcels, are discussed in each parcel's Historical USGS Maps section.

## 2.10 Federal and State Database Review

A search of environmental regulatory databases was conducted for the site and surrounding properties. The database search was conducted by Environmental Data Resources, Inc. (EDR) to determine whether documentation exists related to environmental incidents at the site or surrounding properties. The databases searched and respective search distances from the site as specified by ASTM guidelines are as follows:

- Federal Databases
  - ✓ National Priority List (NPL) – 1 mile
  - ✓ Proposed National Priority List (Proposed NPL) – 1 mile
  - ✓ Comprehensive Environmental Response Compensation, and Liability Information System (CERCLIS) – ½ mile
  - ✓ CERCLIS No Further Remedial Action Planned (CERCLIS – NFRAP) – ¼ mile
  - ✓ Corrective Action Report (CORRACTS) – 1 mile
  - ✓ Resource Conservation and Recovery Information System treatment, storage disposal facility (RCRIS-TSD) – ½ mile
  - ✓ RCRIS Large quantity generator – ¼ mile
  - ✓ RCRIS small quantity generator – ¼ mile
  - ✓ Emergency Response Notification System (ERNS) – Target Property
  - ✓ Superfund (CERCLA) Consent Decrees (CONSENT) – 1 mile
  - ✓ Records of Decision (ROD) – 1 mile
  - ✓ Delisted NPL – 1 mile
  - ✓ Facility Index System/Facility Identification Initiative Program Summary Report (FINDS) – Target Property
  - ✓ Hazardous Material Reporting System (HMIRS) – Target Property
  - ✓ Material Licensing Tracking System (MLTS) – Target Property
  - ✓ Mines master index file (MINES) – ¼ mile
  - ✓ Federal Superfund liens (NPL liens) – Target Property
  - ✓ PCB Activity Database System (PADS) – Target Property

- ✓ RCRA Administration Action Tracking System
- ✓ Toxic Chemical Release Inventory System (TRIS) – Target Property
- ✓ Toxic Substance Control Act (TSCA) – Target Property
- ✓ Section 7 Tracking System (SSTS) – Target Property
- ✓ FIFRA/TSCA Tracking System (FTTS) – Target Property

- State of California, Regional and County Databases
  - ✓ Annual Workplan Sites (AWP) – 1 mile
  - ✓ Cal sites Databases (CAL-SITES) – 1 mile
  - ✓ California Hazardous Material Incident Report System (CHMIRS) – 1 mile
  - ✓ "Cortese" Hazardous Waste and Substance Sites List (CORTESE) – 1 mile
  - ✓ Proposition 65 Records (NOTIFY 65) – 1 mile
  - ✓ Toxic Pits Cleanup Act Sites (TOXIC PITS) – 1 mile
  - ✓ State Landfill – ½ mile
  - ✓ Waste Management Unit Database (WMUDS/SWAT) – ½ mile
  - ✓ Leaking Underground Storage Tank Information System (LUST) – ½ mile
  - ✓ Bond expenditure Plan (CA BOND EXP. PLAN) – 1mile
  - ✓ Active UST Facilities (UST) – ¼ mile
  - ✓ Facility Inventory Database (CA FID UST) – ¼ mile
  - ✓ Hazardous Substance Storage Container Database (HIST UST) – ¼ mile
  - ✓ Aboveground Petroleum Storage Tank Facilities (AST) – Target Property
  - ✓ Cleaner Facilities (CLEANERS) – ¼ mile
  - ✓ Waste Discharge System (CA WDS) – Target Property
  - ✓ List of Deed Restrictions (DEED) – Target Property
  - ✓ Spills, Leaks, Investigation and Cleanup Cost Recovery Listing (CAL SLIC) – ½ mile
  - ✓ Hazardous Waste Information System (HAZNET) – ¼ mile

The results of the EDR database search and descriptions of the environmental databases are provided in Appendix A. The sites identified in the EDR search were evaluated with respect to their potential to impact the Site adversely. Three main criteria were used to evaluate whether the EDR listed sites warranted further consideration: (1) proximity to the site (less than 1/8 mile); (2) hydraulically upgradient with respect to groundwater flow; and (3) hydraulically upgradient of the site with respect to surface water flow/stormwater runoff. EDR maps indicating the distances of the sites identified by the database searches, show distances to the street address of the Georgia Pacific Facility. Therefore the potential impact of the identified sites may vary at each individual parcel. Databases searched in which no facilities were identified are not discussed further in this section.

The G-P Facility is listed on the EDR database under CERC-NFRAP, RCRIS-TSD, RECRIS Large quantity generator, ERNS, Cal-Sites, CORTESE, WMUDS/SWAT, LUST, HIST UST, FINDS, AST, CA WDS, and HAZNET. Each database that identifies the Georgia Pacific Property will be addressed in further detail in Sections 3 through 12 for the applicable Parcel.

The Glass Beach site, located to the North of the G-P Site is listed on the EDR database under CERC-NFRSP and SWF/LF. This property will be discussed in further detail in Section 3.6 for Parcel 1.

According to the EDR database search, one additional site was reported as a RCRIS small quantity generator, Coast Cleaners located at 327 North Franklin Street. This site is not considered to be of environmental concern to the Site due to its location.

The EDR database search identified 6 CORTESE sites within 1/8 mile, 5 CORTESE sites 1/8 to ¼ mile and 8 CORTESE sites ¼ to ½ mile. As referenced above, 9 CORTESE sites were within 1/8 mile of the Site and met the other criteria for further consideration of their impacts. They are as follows:

- Site: Coast Cleaners
  - Address: 327 Franklin Street
  - Location: <1/8 mile N.E.
  - Status: Closed 10/25/00
  - Assessment: This site is not considered to be of environmental concern to the Site due to its location relative to the Site and the closed status of the case.

- Site: Shooters/Rex Pharmacy
  - Address: 250 North Main Street
  - Location: <1/8 mile S.E.
  - Status: Closed 8/14/95
  - Assessment: In May 1995, a minor diesel leak was confirmed at this location. This site is not considered to be of environmental concern to the Site due to its location relative to the Site and the closed status of the case. This site is not considered to be of environmental concern to the Site due to its location relative to the Site and the closed status of the case.

- Site: Fort Bragg Bakery
  - Address: 360 Franklin Street
  - Location: <1/8 mile N.E.
  - Status: Closed
  - Assessment: This site is not considered to be of environmental concern to the Site due to its location relative to the Site and the closed status of the case.

- Site: Fort Bragg City Justice Center
  - Address: 363 North Main Street
  - Location: <1/8 mile N.E.
  - Status: Closed
  - Assessment: This site is not considered to be of environmental concern to the Site due to its location relative to the Site and the closed status of the case.

- Site: Unocal Service Station #2211
  - Address: 225 Main Street
  - Location: <1/8 mile S.W.
  - Status: Open
  - Assessment: During Site reconnaissance activities three monitoring wells were observed on site. This site will be discussed in further detail in Section 5.

- Site: Coast to Coast Hardware
  - Address: 300 North Main Street
  - Location: <1/8 mile E.
  - Status: Closed 12/8/99
  - Assessment: In October 1999, a minor diesel leak was confirmed at this location. This site is not considered to be of environmental concern to the Site due to its location relative to the Site and the closed status of the case.

- Site: One Stop Shop
  - Address: 105 South Main Street
  - Location: <1/8 – ¼ mile S.
  - Status: Characterization
  - Assessment: In July 1998, a minor gasoline leak was confirmed at this location. This site will be discussed in further detail in section 7.

- Site: Beacon #493
  - Address: 210 South Main Street
  - Location: <1/4 – ½ mile S.
  - Status: Characterization
  - Assessment: In June 1989, a minor gasoline leak was confirmed at this location. This site will be discussed in further detail in section 7.

- Site: Texaco, R & B
  - Address: 700 South Main Street
  - Location: <1/2 – 1 mile S.
  - Status: No Action Required
  - Assessment: In August 1989, a minor waste oil leak was confirmed at this location. This site is not considered to be of environmental concern to the Site because no action was required by the Regional Water Quality Control Board.

The EDR database search identified 5 LUST sites within 1/8 mile, 7 LUST sites 1/8 to ¼ mile and 13 LUST sites ¼ to ½ mile. As referenced above, 8 LUST sites were within 1/8 mile of the Site and met the other criteria for further consideration of their impacts. They are as follows:

- Site: Coast to Coast Hardware
  - Address: 300 North Main Street

- Location: <1/8 mile E.
- Status: Closed 12/8/99
- Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: Coast Cleaners
  - Address: 327 Franklin Street
  - Location: <1/8 mile N.E.
  - Status: Closed 10/25/00
  - Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: Shooters/Rex Pharmacy
  - Address: 250 North Main Street
  - Location: <1/8 mile S.E.
  - Status: Closed 8/14/95
  - Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: Fort Bragg Bakery
  - Address: 360 Franklin Street
  - Location: <1/8 mile N.E.
  - Status: Closed
  - Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: Fort Bragg City Justice Center
  - Address: 363 North Main Street
  - Location: <1/8 mile N.E.
  - Status: Closed
  - Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: One Stop Shop
  - Address: 105 South Main Street
  - Location: <1/8 – ¼ mile S.
  - Status: Characterization
  - Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: Beacon #493
  - Address: 210 South Main Street
  - Location: <1/4 – ½ mile S.
  - Status: Characterization
  - Assessment: This site was discussed earlier as part of the CORTESE section.

- Site: Texaco, R & B
  - Address: 700 South Main Street
  - Location: <1/2 – 1 mile S.
  - Status: No Action Required
  - Assessment: This site was discussed earlier as part of the CORTESE section.

Seven UST or HIST UST sites were identified within 1/8 mile of the Site. Fifteen additional UST or HIST UST sites were identified within 1/8 mile to ¼ mile of the Site. The sites which met the criteria for further consideration are as follows:

- Site: Shafskey's Ben Franklin Store (HIST UST)
  - Address: 338 North Main Street
  - Location: <1/8 mile N.E
  - Tanks: 1 USTs

- Site: Ten Mile Justice Court (HIST UST)
  - Address: 363 North Main Street
  - Location: <1/8 mile S.W.
  - Tanks: 1 UST

- Site: Bank of America LP Gas Storage (HIST UST)
  - Address: 228 North Main Street
  - Location: <1/8 mile S.E
  - Tanks: 1 UST

- Site: UNOCAL (CA FID UST/HIST UST)
  - Address: 225 North Main Street
  - Location: <1/8 mile S.E
  - Tanks: 1 USTs

- Site: Bob's Union 76 (UST)
  - Address: 225 North Main Street
  - Location: <1/8 mile S.E
  - Tanks: 1UST

- Site: Coast Cleaners (CA FID UST)
  - Address: 327 North Franklin Street
  - Location: <1/8 mile E
  - Tanks: 1 USTs

- Site: Fort Bragg Fire Department
  - Address: 141 N Main Street
  - Location: <1/8 – 1/4 mile SSE
  - Tanks: 1 USTs

- Site: Severi's Service
  - Address: 105 N Main Street
  - Location: <1/8 – 1/4 mile SSE
  - Tanks: 1 USTs

Coast Cleaners Site was discussed previously in the CORTESE section. There are no records of spills or releases available for the other listed sites. The EDR report is contained is Appendix A.

# 3.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 1

## 3.1 Subject Parcel

The area designated as Parcel 1, North Coastal Zone Parcel, is an approximately 62-acre plot of land located along the northwestern portion of the G-P Facility (Figure 2). Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 1 was used as log storage. Parcel 1 was subsequently divided into six areas of interest (1.1 through 1.6) identified during site reconnaissance activities (Figure 3.1). The identified areas of interest in Parcel 1 are designated as glass beach No. 1, glass beach No. 2, soil stockpiles (removed by Pacific Marine Farms, leaser of property), pump house, fire water pond, and glass beach No. 3.

According to interviews with Georgia Pacific personnel and the City of Fort Bragg's Negative Declaration, between 1949 and 1967, Parcel 1 and the areas north were owned by Union Lumber Company. To the north of Parcel 1, along Elm Street, Union Lumber Company operated a privately owned dump. Waste was discharged over the bluffs (from two locations) into the ocean or placed in pits where it was burned and buried. Title to the property was transferred from Union Lumber Company to Boise Cascade Lumber Company in 1969, and then to Georgia Pacific Corporation in 1973. In 1991, the property north of Parcel 1 (north of Elm Street) was purchased by William J. Blinn Trust.

Currently the space does not contain any piles of lumber. Running north to south along the coastline, an old municipal sewer line was noted jutting out from the cliff. Several large piles of collected dirt and tree bark were observed in various locations around the site. Throughout the open space area, fire hydrants were observed emerging from the ground. The piping that connects the fire hydrants is above ground. There is potential presence of ACM in the pipe lining.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 3.2 Site Inspection

TRC conducted the physical site inspection of Parcel 1 on August 11, 2002, September 12, 2002 and October 16, 2002. Information related to Parcel 1 was obtained through interviews with Mr. Richard Benedetti, Mr. Doug Heitmeyer and Mr. Paul Johnson, employees of Georgia Pacific. Mr. Michael Woody was present to allow access to the Site. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility and is currently retired. Mr. Michael Woody is currently the West Coast Regional Environmental Resources Manager. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years. Mr.

Paul Johnson is a Fort Bragg resident and an employee of the Sawmill for approximately 40 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 3.2.1 Glass Beach Nos. 1, 2, and 3

Glass Beach No. 1 is located on the northwest tip of Parcel 1. Glass beach Nos. 2 and 3 are located south along the coastline from glass beach No. 1. According to the City of Fort Bragg's Negative Declaration, the Glass Beach No. 1 area was owned by Union Lumber and operated as a private dump between 1949 and 1967. Based on interviews with G-P personnel, household waste, scrap metal, and automobiles were discharged over the bluffs (from the two locations) into the ocean or placed in pits to be burned and buried.

During site reconnaissance activities, areas of staining along the cliffs, debris on the beaches, concrete retaining walls, and areas of melted debris fused with native rock formations were observed at both locations.

The debris on the beaches consists mainly of polished glass pieces which are not considered a environmental concern. Additionally, a small amount of scrap metal was observed on the beach at each of the Glass Beach locations.

The majority of the fused melted metal with the native rock, observed at Glass Beach Nos. 1, 2, and 3, is located below the high tide line.

### 3.2.2 Soil Stockpiles on Leased Land

During the site visit, a large soil stockpile was observed on the southeast portion of Parcel 1 (Figure 3.1). The stockpile was approximately 6-feet wide, 3-feet high, and 200-feet long, and is located on the portion of Parcel 1 that is leased to Pacific Marine Farms. The stockpiles contained scrap metal, tires, and other miscellaneous debris and were located on a fenced portion of Parcel 1 that is covered with asphalt. Pacific Marine Farms have since removed the stockpiles from the property.

### 3.2.3 Pump House

The pump house, located on western portion of Parcel 1, is a 30-foot by 10-foot painted wood structure constructed on a concrete pad (Figure 3.1). Based on interviews and review of historical topographic maps, the pump house was likely constructed in the late 1950s. The pump house contains two diesel motors used to pump water from the fire water pond to the fire hydrants located on Parcel 1. Located outside of the pump house, in

a concrete berm, is a 500-gallon diesel AST. The AST provides fuel to the two diesel engines within the pump house. During the site visit, it was observed that the above ground pipes, which deliver the water to the fire hydrants, are lined with suspect ACM. Additionally, no staining was observed on the ground surrounding the pump house or diesel AST, during site reconnaissance activities.

#### 3.2.4 Fire Water Pond

The fire water pond, located on the western portion of Parcel 1, is approximately 100 foot by 300 foot reservoir (Figure 3.1). The water is intended for fire suppression purposes.

### 3.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. The photographs from the years 1966 and 1973 do not provide coverage of Parcel 1. The key findings from this review are provided in the following section. These photographs are enclosed in Appendix C.

1952, 1957, 1963, 1982

In the aerial photographs from 1952, 1957, 1963, and 1982, the majority of Parcel 1 is covered by stacks of lumber. In the 1957 the fire water pond and pump house are first evident.

### 3.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received 5 Sanborn maps, from the years 1890, 1898, 1909, 1919, and 1941. None of the Sanborn maps received by TRC contained coverage of Parcel 1.

### 3.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received 4 maps from the years 1943, 1960 (2), and 1978. In the 1943 map, a road to the coast is shown emanating from Fir Street. In the subsequent map the road was moved north to Elm Street.

### 3.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. No files pertaining specifically to Parcel 1 were found during this review.

Glass Beach (William J. Blinn Trust Site)

TRC also reviewed files pertaining to the Glass Beach Site north of the Georgia Pacific facility (and Parcel 1). The following presents a summary of our findings at the file review.

This site is and approximate 38-acre parcel located west of Highway 1, north of the G-P Property, and south of Pudding Creek in Fort Bragg, California. According to the City of Fort Bragg's Negative Declaration, between 1949 and 1967 the site was owned by Union Lumber Company and was operated as a privately owned dump. Waste was discharged over the bluffs (from two locations) into the ocean or placed in pits where it was burned and buried. Title to the property was transferred from Union Lumber Company to Boise Cascade Lumber Company in 1969, and then to Georgia Pacific Corporation in 1973. The property was purchased by the present owner in 1991. A motorcycle racetrack was operated on a portion of the property between the 1950s and 1980s. (SHN Consulting, 2002). The Regional Water Quality Control Board, North Coast Region has provided oversight of the project.

Files reviewed in regards to this site included: *Site Assessment Report, Glass Beach Property, Fort Bragg, California* (SHN Consulting, 2000), *Additional Site Investigation Report of Findings, Glass Beach Property* (SHN Consulting, 2001), *Remedial Action Plan, Glass Beach Property* (SHN Consulting, 2002), and the Notice of Intent to Adopt a Negative Declaration, (City of Fort Bragg, 2002). The Remedial Action Plan is contained in Appendix D.

A preliminary site investigation was conducted by SHN Consulting in January/February 2000. SHN advanced 24 borings, utilizing a hand auger, for the purpose of collecting soil samples. Sample depths ranged from surface samples to 1.5 feet below grade (fbg). All samples were analyzed for TPH as diesel, TPH as motor oil, arsenic, cadmium, chromium, nickel, lead, and zinc. Select soil samples were analyzed for PCBs, pesticides, and SVOCs. The investigation identified two areas impacted with lead and total petroleum hydrocarbons as diesel and as motor oil which required additional investigation.

In April 2001, SHN advanced 34 soil borings to a depth of 8 fbg, using direct push technology. Elevated lead, copper, and nickel concentrations were found in the area designated as Area 1. Elevated lead and nickel concentration were detected in the area designated Area 2. Using the waste extraction test method, six samples collected from Areas 1 and 2 contained concentrations of lead which could classify the soil as hazardous. TPH as diesel concentrations ranged from concentrations below the laboratory detection limit of 1 milligram per kilogram (mg/kg) to 330 mg/kg. TPH as motor oil concentrations ranged from concentrations below laboratory detection limits of 2 mg/kg to 1,400 mg/kg. TPH as gasoline and BTEX were not detected in any of the soil samples (SHN, 2002).

In May 2002 SHN prepared a Remedial Action Plan (RAP) (Appendix D) which identified three remedial options for the site. The selected remedial technology was excavation of source areas with off-site disposal of excavated materials. The RAP calls for excavating materials two feet below the refuse zone (approximately 4 fbg to 10 fbg), in areas above the high tide line. It is estimated the excavation will generate 2,000 cubic feet of soil. Figure 3 and 4 of the RAP shows the proposed excavation area. The clean-up goals are 50 mg/kg for total lead and 100 mg/kg for TPH as diesel and TPH as motor oil. (Fort Bragg, 2002).

## 3.7 Site Records Review

During the site visit conducted for Parcel 1, on-site records were reviewed for information regarding Parcel 1. No files pertaining specifically to Parcel 1 were found during this review.

## 3.8 Electrical Transformers

During the site visit conducted for Parcel 1, a preliminary visual survey was conducted for the presence of electrical transformers. No electrical transformers were observed on Parcel 1.

## 3.9 Suspected Asbestos Containing Materials

During the site visit conducted for the subject Parcel, a preliminary visual survey of the readily visible construction and insulation materials was performed by TRC. The above ground pipes, which deliver the water to the fire hydrants, may contain suspect ACM.

## 3.10 Lead Based Paint

A preliminary visual lead based paint screening survey was conducted of the pump house building located on Parcel 1. Due to the date of construction (prior to 1964), the building may contain areas with lead based paints. The U.S. Consumer Protection Safety Commission banned lead based paints in 1978. No paint samples were collected or analyzed.

## 3.11 Conclusions and Recommendations

### 3.11.1 Summary of Parcel 1 Findings

During site reconnaissance activities for the G-P Facility, TRC made the following findings regarding Parcel 1:

- The majority of Parcel 1 was used as log storage.
- Parcel 1 is currently under lease to Pacific Marine Farms.

- The presence of debris on the beaches, scrap metal, concrete retaining walls, areas of staining along the cliffs, and areas of melted debris fused with native rock formations was observed at Glass Beach Nos. 1, 2, and 3. The majority of debris on the beach consists of polished glass and is not considered an environmental concern. The areas of melted debris fused with native rock formations are generally located below the high tide line.

- Large soil stockpiles were observed on the southwestern portion of Parcel 1 on asphalt paving. The stockpiles contained scrap metal, tires, and other miscellaneous debris. Pacific Marine Farms has since removed the stockpiles from the property.

- The pump house, located on western portion of Parcel 1, constructed in the late 1950s, contains two diesel motors used to pump water from the fire water pond to the fire hydrants located on Parcel 1. Additionally, due to the date of construction, the pump house may contain lead based paint.

- Located outside of the pump house, in a concrete berm, is a 500-gallon diesel AST which provides fuel to the engines. No staining was observed in the concrete berm.

- The above ground pipes, which deliver the water to the fire hydrants, contain suspect ACM.

### 3.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- The subsurface soils and groundwater above the high tide line, in the areas of Glass Beach Nos. 1, 2, and 3 should be investigated for metals and TPH, based on the accepted SHN Remedial Action Plan.

- Remove abandoned scrap metal on Glass Beach Nos. 1, 2, and 3.

- Due to the age of the Pump House, the surrounding area should be investigated for TPH as diesel.

- Perform survey of the insulation in piping for ACM.

- Perform lead based paint survey on pump house

# 4.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 2

## 4.1 Subject Parcel

Parcel 2 is an approximately 9-acre plot of land located on the northwestern portion of the G-P Facility (Figure 2). The parcel is currently occupied by a high ceiling wood warehouse, divided into 4 areas, and vacant land. Historical photos and interviews suggest the building was constructed in phases between 1958 and 1963.

According to interviews with G-P personnel, the building present on the parcel of interest was built in four stages. The first section, designated "Dowel Loc" (Figure 4.1), was erected between 1958 and 1960. Originally this section of the facility was used to prefabricate wood sections used in the construction of railroad flat cars and the beds of old trucks. During the late 1960's this area was utilized to form pre-made fence posts. Then, between 1980 and 1982 the fence post operation was halted and the area was renamed Resaw No. 6. It remained Resaw No. 6 until 1999 when the entire facility was leased to Pacific Marine Farms, Inc.

The three areas added on to the Dowel Loc portion of the facility, known as Glue Lam (western addition), Breezeway (northwest), and Storage Shed No. 2 (north of Breezeway) were all constructed in 1963. The Glue Lam area was utilized for the gluing process involved in the Dowel Loc fitting production. In 1970 this portion of the facility became known as Finger Joint, and stayed in operation until 1990. When all processes were halted in this facility, the Glue Lam area was used for the storage of electric motors. Currently this section is being subleased to Pollard Construction by Pacific Marine Farms, Inc. The Breezeway section of the facility was used to load timber into the Glue Lam and is now subleased to North Coast Brewing. Storage Shed No. 2 was the storage area for dry lumber and is now subleased to Fred Holmes Lumber.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 4.2 Site Inspection

TRC conducted the physical site inspection of the Site, on April 24, 2001, October 17, 2002 and November 5, 2002. Both, Mr. Paul Johnson and Mr. Doug Heitmeyer, employees of Georgia Pacific, were present to allow access to the Site and offer historical insight. Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. The parcel consists of a Georgia Pacific warehouse leased to Pacific Marine Farms Inc. Observations made during the site inspection work are further described below. Photographs in Appendix B present views of the interior and exterior of the Site building and open field area.

### 4.2.1 Site Building

The parcel building is located on the southeast portion of the parcel of interest. The building is of wood construction with an asphalt flooring and high ceilings. It consists of four separate areas; identified as Dowel Loc, Glue Lam, Breezeway, and Storage Shed No. 2. Figure 4.1, presents the Parcel building sub-divisions. These areas are subleased, by Pacific Marine Farms, to various tenants.

### 4.2.2 Dowel Loc

The area identified as Dowel Loc (Resaw No. 6), is located on the southeast corner of the building. It is approximately 70 feet by 170 feet. The Dowel Loc area is constructed of painted wood and has asphalt floors. Several areas of the floor were covered with dirt and areas of staining were also observed. No insulation was observed on the walls. Several areas of the flooring consisted of broken asphalt and concrete patches. Tools, wood piles, large pipes, scrap iron, scrap wood, and car parts are present around the Dowel Loc area. Two 55-gallon drums containing electric insulating oil were observed in the western portion of the building. Additionally, two truck trailers, a bucket of motor oil, acetylene, and oxygen containers were located in the same area. The trailers were locked, therefore restricting access to their contents. The acetylene and oxygen canisters were securely chained to a metal rack. Along the north wall of the facility a bucket of motor oil and a boat and trailer were observed. Along the southern wall the following items were observed: two tanks used for asphalting, tires, tractor parts, truck trailer with a bin, and paint cans.

A separate room, identified as the “saw room” is located in the eastern portion of the Dowel Loc area. A covered trench running down the center of the Dowel Loc facility, was at one time a screw conveyor belt used to remove sawdust from the work area. A large depressed area or “pit” is located in the southern portion of the facility. The pit is concrete lined and was once underneath the stacking machine to facilitate the wood stacking process.

### 4.2.3 Glue Lam

To the west of the Dowel Loc area is the portion of the facility identified as Glue Lam. The space is approximately 50 feet by 100 feet and is constructed of painted wood walls and ceiling and asphalt flooring. A large corrugated metal roll-up door is located on the eastern wall. Along the ceiling of this area, running west to east, is a crane mounted to a metal beam, once used to transfer wood through the facility. At one time, this portion of the facility was used for the storage of electric motors used by Georgia Pacific in their plant operations. The current tenants use the area for general storage. Several areas of staining were noted along the southern and northern portion of the asphalt floor. A “contractor’s shed”, located along the western wall, contained several cans of paint and paint thinner stored without the use of secondary containment. Located along the northern wall, a table and cabinet were observed, which contained thinners, coolant,

paint, spackle, and glue. Scrap metal and wood was observed throughout the Glue Lam portion of the facility. Additionally, a forklift and generators were also observed.

### 4.2.4 Breezeway

To the north of the Glue Lam is the Breezeway Area. The space is approximately 50 feet by 100 feet and constructed with painted wood walls and ceiling and has asphalt flooring. At one time this area contained glue vats used in the dowel making process and was also the in feed for the lumber storage shed. Currently this space is occupied by North Coast Brewery. Several wood pallets, carbon dioxide canisters, and vats for brewing beer were observed in the northeast corner. The southeast corner contained roofing paper, several empty buckets of roofing adhesive, a car seat, stakes, fluorescent light bulbs, and tires. Along the South wall the following items were observed: a truck cab, tires, wood, steel, and glass debris. Several large areas of heavy staining on the asphalt were noted throughout the Breezeway Area.

### 4.2.5 Storage Shed No. 2

The northern portion of the facility was designated Storage Shed No. 2, and according to Paul Johnson, was primarily used for the storage of dry lumber. The space is approximately 50 feet by 170 feet and is constructed of painted wood ceiling and walls and asphalt flooring. It is currently being leased to Fred Holmes Lumber. Stacks of lumber are currently be stored along the south and north walls. The following items were observed in the northwest corner of the facility: crab traps, six drums of clear was sealer, a forklift, and wood pallets with rolls or tarp paper. The forklift appeared to be leaking oil onto the concrete floor. According to Mr. Doug Heitmeyer, at one point in the past, out of service transformers were stored in the northwestern corner of Storage Shed No. 2. Mr. Heitmeyer indicated that the transformers were stored in a bermed area on a plastic tarp. No areas of staining were noted in this section of the facility.

An empty drum of motor oil was observed in the southwestern corner of the facility. A large boat is being stored in the northeastern corner. Minor staining of the asphalt floor along with wood and general debris was observed in areas of the Storage Shed.

### 4.2.6 Outside of Parcel Building

Located to the west of the Glue Lam and Breezeway sections of the parcel structure is an open area used for lumber storage. Fire hydrants and aboveground piping were observed in this area. The insulation on the aboveground piping is a suspect ACM. Additionally, boats and vehicles were observed parked in this area.

Outside of the Dowel Loc building, located to the south of the facility, two rail cars, a drum containing rusted parts, and general debris were noted in the area. Located along the northeast side of the structure, a large debris pile was noted. The pile included: truck

parts, scrap metal, 55-gallon drums, propane tanks, and appliances. The debris pile, and the material observed during the 2002 site visit have since been removed from this site.

Outside of Storage Shed No. 2, along the eastern wall, two rusted former USTs were observed. The former USTs have since been removed from the Site. Further east of Storage Shed No. 2 a fire hydrant with aboveground piping was observed with torn insulation around it. The insulation is a suspect asbestos containing material. North of Storage Shed No. 2, a flatbed truck, a recreational vehicle, wood debris, and a pole-mounted transformer were observed. Additionally, staining of the asphalt was noted in this area. Staining was also observed on the asphalt area east of the breezeway.

### 4.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. Photographs from the years 1952, 1957, 1963, 1973, and 1982 provided coverage of Parcel 2. Appendix C contains Historical Aerial Photographs. The key findings from this review are provided in the following section.

1952 and 1957

In the 1952 and 1957 aerial photographs, Parcel 2 was used for lumber storage. No structures were present.

1963, 1966

In the 1963 and 1966 aerial photographs, the “dowel loc” building is present.

1973, 1982

Parcel 2 in the 1973 and 1982 aerial photos appears much as it does today, with all sections of the building present.

### 4.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received five Sanborn maps, from the years 1898, 1909, 1919, and 1941,which contained coverage of portions of the Georgia Pacific facility. None of the Sanborn maps obtained by TRC contained coverage of Parcel 2.

### 4.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. In the 1943 map, a road to the coast is shown emanating from Fir Street. In the subsequent map the road was moved north to Elm Street.

## 4.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. No files pertaining specifically to Parcel 2 were found during this review.

## 4.7 Site Records Review

During site reconnaissance activities conducted for Parcel 2, site records were reviewed. During the site records review a Transformers Inspection and Maintenance Log was examined. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the facility. Although the log does not specify the exact location of each transformer it does give a general location. According to the Maintenance log there were four pole mounted transformers located in the vicinity of the Parcel 2 building.

## 4.8 Electrical Transformers

During the site visit conducted for Parcel 2, a preliminary visual survey was conducted for the presence of electrical transformers. Along the northern portion of Parcel 2, a pole mounted transformer was observed. Additionally, a Transformers Inspection and Maintenance Log was reviewed. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the facility. Although the log does not specify the exact location of each transformer it does give a general location. According to the Maintenance log there were four pole mounted transformers located in the vicinity of the Parcel 2 building.

According to Mr. Heitmeyer, all transformers currently on Site are PCB free (<50ppm).

## 4.9 Suspected Asbestos Containing Materials

During the site visit conducted for the subject Parcel, a preliminary visual survey of the readily visible construction and insulation materials was performed by TRC. The above ground pipes, which delivers the water to the fire hydrants, are most likely lined with an asbestos containing material.

## 4.10 Lead Based Paint

A preliminary visual lead based paint screening survey was conducted of the on-site building located on Parcel 2. Due to the date of construction (prior to 1964), the building may contain areas with lead based paints. The U.S. Consumer Protection Safety Commission banned lead based paints in 1978. No paint samples were collected or analyzed.

## 4.11 Conclusions and Recommendations

### 4.11.1 Summary of Parcel 2 Findings

During site reconnaissance activities for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 2:

- The majority of Parcel 2 was used as log storage until the early 1960s when the Dowel Loc structure was constructed.
- This parcel is currently under lease to Pacific Marine Farms which in turn has subleased this to several businesses.
- Two former USTs were observed stored aboveground outside of the Parcel building. The tanks were brought on site by one of the entities leasing this property. The Tanks have since been removed.
- Suspect housekeeping practices were observed in the Parcel building. Staining was observed on concrete located inside Parcel buildings and outside breezeway and Storage Shed No. 2. Minor piles of debris were observed outside Dowel Loc. These debris piles have since been removed.
- Due to the date of construction, a LBP was likely used on the Parcel facility.
- The above ground pipes, which deliver water to the fire hydrants, contain suspect ACM.
- A pole mounted transformer was observed on the Parcel.

### 4.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate the following areas inside and surrounding the Parcel Building for metals, solvents, and petroleum hydrocarbons:
    - Inside Dowel Loc, breezeway, Storage Shed, and Glue Lam.
    - Staining located in open area east of breezeway.
    - Staining located along Northern areas of Storage Shed No. 2
- Remove drums, paints and other materials from facility.
- Perform survey of insulation in piping for suspect ACM.
- Perform lead based paint survey on Parcel facility.

# 5.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 3

## 5.1 Subject Parcel

The area designated as Parcel 3, Industrial Parcel, is an approximately 64-acre plot of land located northern portion of the G-P facility (Figure 2). Parcel 3 was subsequently divided into sixteen areas of interest (3.1 through 3.16) identified during site reconnaissance activities (Figure 5.1). The identified areas of interest in Parcel 3 are designated as Scrap Yard, Truck Loading Shed, Railroad Spurs, Yard Office, Planer No. 50, Former Planer No. 1, Air Compressor Pad, Dry Shed No. 4 and Dry Shed No. 5, Former Mobile Equipment Shop, Construction Engineering, Kilns Area, Compressor House, Machine Shop, Sheet Metal/Plumbing and Plant Supply, Training Center, and Covered Shed.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 5.2 Site Inspection

TRC conducted the physical site inspection of Parcel 3 on October 16 and 17, 2002. Information related to Parcel 3 was obtained through interviews with Mr. Richard Benedetti and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility, and is currently retired. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 5.2.1 Scrap Yard

The Scrap Yard is located along the southwest edge of Parcel 3, adjacent to the cliff edge to the ocean. The area is currently used to store various metal scrap debris and has been in existence since approximately 1995, according to Mr. Heitmeyer. Prior to 1995, the area was used for lumber storage.

During site reconnaissance, TRC observed various debris and scrap stored in the Scrap Yard including metal scrap, metal buckets, piping, chains, fencing, plastic, car parts (i.e., engine block, doors, seats), and pieces of a transformer (see Photo 1, Appendix B). Scrap and debris was observed at the cliff edge and in the surf soil below. Ground

staining was not observed in the area. The debris and scrap have since been removed from this area as a part of G-P's facility decommissioning / closure activities.

### 5.2.2 Truck Loading Shed

The Truck Loading Shed is located in the west area of Parcel 3 and was used for wood storage and loading trucks for offsite transportation of wood products. The Shed is a painted wood building with inside overhead lighting. The north portion of the building was constructed in the early 1970s and the south side was constructed in 1978. The floor is asphalt with some concrete in the east area.

During inspection, the greater part of the Shed was vacant, however, a portion of the south area is leased for hay storage. Some tools were observed in the south area. Transformers are stored in the west area of the Shed (see Photo 2, Appendix B). The transformers are empty, according to Mr. Heitmeyer, and have been stored at this location for approximately six months. Surface staining was not observed in the transformer storage area nor in other parts of the Shed.

### 5.2.3 Railroad Spurs

Several railroad spurs are located adjacent and west of Former Planer No. 1 and east of the Truck Loading Shed. According to plant personnel, railcars were loaded and unloaded at this location and transported by locomotive. During Former Planer No. 1 operations, the locomotives resided along the railroad spurs to unhook/hookup to railcars.

### 5.2.4 Yard Office

Review of historical aerial photographs reveals the Yard Office was constructed in the mid-1950s. Plant personnel indicate the Yard Office has always been used as offices. Based on the interior inspection of the Yard Office and date of construction, building materials, including floor tiles, are suspect ACM. In addition, due to the date of construction, the building may contain areas with lead based paint.

### 5.2.5 Planer No. 50

Planer No. 50 is a painted wood building with overhead inside lighting and asphalt flooring. Horizontal roll doors are located on the east and west sides of the building. Review of historical aerial photographs reveal the building was constructed between 1957 and 1963. Plant personnel indicate that during plant operations, the building has always been used for planer operations (i.e., lumber cutting) with related heavy equipment such as trim saws and stackers. Minor oil and grease are associated with planer activities, according to site personnel. Planer No. 50 building was being used for wood storage during site inspection. An overhead transformer was observed outside the southeast corner of the building.

### 5.2.6 Former Planer No.1

The Former Planer No.1 building, located on the north side of Parcel 3, was constructed prior to the early 1950s (based on review of historical photographs) and demolished in the late 1990s. Most of the floor is asphalt with concrete foundations at former equipment locations and concrete building footings. Concrete debris and rebar were observed in various areas of Former Planer No. 1. Currently, the area formerly occupied by Planer No. 1 remains undeveloped.

Two equipment foundations filled with sand, approximately 20 feet by 20 feet in length, were observed in the northeast area of Former Planer No. 1. The foundation sand pits were lined with concrete walls, however, depth is not known. Stained sand and stained wood was noted in the foundations (see Photo 3, Appendix B). Mr. Heitmeyer explained that during planer operations, wood was fed onto a conveyor belt over these sand foundations.

A former drum storage containment is located in the southeast corner of Former Planer No. 1 area (see Photo 4, Appendix B). The storage area is constructed of concrete with concrete berms and metal grate cover. The area measures approximately 10 feet by 20 feet in length. According to Mr. Heitmeyer, drums containing oil and related products were stored here. Residual fluid with visible sheen was observed in the containment.

During site reconnaissance, two transformer pads were noted on the north side of Former Planer No. 1, each pad contains three transformers (see Photo 5, Appendix B). An overhead transformer was noted in the southwest corner of Planer No. 1 area. In addition, overhead transformers were previously located outside the southeast corner of Former Planer No. 1 building, according to Mr. Heitmeyer.

### 5.2.7 Air Compressor Pad

During the site reconnaissance, a concrete pad was located between Planer No. 50 and Dry Shed No. 4. Some staining was observed on the concrete pad. According to plant personnel, an air compressor used to be in operation on the pad. Based on document review, personnel interviews, and site inspection, the date of pad construction and period of compressor usage is not known.

### 5.2.8 Dry Shed No. 4 and Dry Shed No. 5

During plant operations, Dry Shed No. 4 and Dry Shed No. 5 were strictly used for lumber storage, according to facility personnel (see Photo 6 and 7, Appendix B). Historical site photographs and plant personnel indicate the east portion of Dry Shed No. 4 was built in 1978, the west portion of Dry Shed No. 4 and Dry Shed No. 5 was built prior to the early 1950s. Both buildings are of wood construction, painted, with concrete footings for wood support beams and overhead lighting. Asphalt floors are maintained throughout Dry Shed No. 4 and the main drive areas of Dry Shed No. 5.

Lumber storage areas of Dry Shed No. 5 are dirt floors. Minor staining was observed in Dry Shed No. 5 in vehicle travel areas.

According to Mr. Heitmeyer, the northwest corner area of Dry Shed No. 4 was formerly used to store transformers prior to the early 1990s. During this time, the transformers were stored in an open shed on a dirt floor.

According to Mr. Johnson, a dip tank was located outside the northwest corner of Dry Shed No. 4. Apparently, during operation, wood was dipped into the tank containing wood preservative chemicals. SVOCs are associated with wood preservative chemicals. Plant personnel indicated the tank was set into the ground and the open top was flush with the ground. In addition, plant personnel indicated the tank was abandoned in place.

During the interior inspection of Dry Shed No. 4 and Dry Shed No. 5, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Due to the date of construction, (prior to 1964), the buildings may contain areas with lead based paints.

### 5.2.9 Former Mobile Equipment Shop

During operation, the Former Mobile Equipment Shop Area was used for equipment repair, fuel dispensing, equipment storage and equipment wash. According to plant personnel, degreasers were used in both equipment wash areas. The Shop Area, located in the northeast portion of Parcel 3, consisted of two buildings with concrete floors. The buildings were constructed in the late 1960s to early 1970s and demolished in the late 1980s to early 1990s (according to plant personnel). Currently, the area formerly occupied by the Mobile Equipment Shop remains undeveloped.

The northern building operated as the lube bay (main building area), fuel dispensing (north side of building), and equipment wash (south side of building). Surface staining was observed in the fuel dispenser area and west lube bay area. The south building was used for equipment storage and washing. Water from equipment washing would runoff into a concrete catch basin on the south side of the building. The catch basin is approximately 10-feet by 10-feet in length, depth unknown. The north portion of the catch basin is covered by a metal grate and the south portion is covered by woods slats (see Photo 8, Appendix B). During site assessment, liquid was observed in the catch basin and staining was observed on the wood slats and within the catch basin. A 3-foot by 3-foot concrete sump was located next to the catch basin to the east. Standing liquid and staining was observed inside the concrete sump.

During the inspection, a metal pipe was observed from the southern building foundation and extending on the ground surface approximately 10-feet in the southerly direction where it appeared to be broken at the end (see Photo 9, Appendix B). Discolored soil

was discovered in the end opening of the pipe containing hydrocarbon odors. Facility personnel were not aware of the nature and extent of the pipe.

The east area of the Former Mobile Equipment shop location is adjacent to offsite railroad mechanical operations. Petroleum hydrocarbons are associated with railroad mechanical operations.

### 5.2.10 Construction Engineering

Construction Engineering is a wood building consisting of an open storage area, an indoor storage area, an office area, and a nearby portable shed. The building is approximately 500-feet by 200-feet in length. Historical photographs indicate the building was constructed between 1952 and 1957. Review of site documentation indicate the storage of three portable sets of oxygen (850 cubic feet) and acetylene (330 cubic feet) tanks in the open storage area, 400-gallons of latex paint 200-gallons of enamel paint in the indoor storage area, and 110-gallons of used paint thinner in the nearby portable shed. A detail of Construction Engineering is shown in Figure 5.2.

The open storage area, located in the north portion of the building, has asphalt flooring, some dirt floor, and no walls (see Photo 10, Appendix B). Items identified in the open storage area during site reconnaissance include metal parts, various equipment, 5-gallon buckets, small transformers and associated transformer insulation pieces. Several 5-gallon buckets without lids contained substances unknown to plant personnel. Also located in the open storage area was over 100-gallons of paint, thinners, and enamels.

The indoor storage area, located in the south portion of the building, is painted and contains additional paints, thinners, and solvents (see Photo 11, Appendix B). Also stored here are employee lockers and tools and associated parts.

An office area, located in the southeast portion of the building, is painted with tiled flooring and contains filing cabinets and other office associated items.

During the interior inspection of the Construction Engineering building, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. Based on the date of construction, the tile flooring is a suspect ACM. Additionally, due to the date of construction, the building may contain areas with lead based paints.

### 5.2.11 Kilns Area

The Kilns Area is located in the east portion of Parcel 3 (see Photo 12, Appendix B). During operation, the Kilns were used to dry lumber. Lumber entered large fully enclosed pre-dryers (south portion of Kilns Area) in carts on metal rails. The lumber then entered fully enclosed kilns (central portion of Kilns Area) and finally the roofed cooling sheds without walls (north portion of Kilns Area). The kilns were constructed between

1953 and 1960, as indicated on the individual kilns. However, review of historical photographs and Sanborn maps indicate kiln buildings were present as early as 1909.

The pre-dryers and kilns are constructed of brick with concrete flooring. The pre-dryers kilns have large metal doors on the south and north side for lumber entrance/exit. Specific contents of the brick are unknown, however they may contain insulation substances of concern based on the date of construction. According to plant personnel, the pre-dryer and kilns interiors and roofs were coated with tar to prevent moisture penetration. A second-story hallway traverses the south side of the kilns where piping, including some insulation, and controls are located. The hallway area was built approximately late 1950s to early 1960s and is constructed of wood, painted on the inside and outside. Based on date of construction and appearance, piping insulation in the hallway is suspect ACM. In addition, a lube oil storage shed was located between the kiln buildings. No staining was observed in the lube oil storage shed area.

The cooling sheds, located on the north side of the pre-dryers, have corrugated metal roofing with asphalt flooring and no walls.

During the site assessment, transformer boxes were located on the ground on the south side of the kilns.

### 5.2.12 Compressor House

The Compressor House Area is located in the southern portion of Parcel 3 and consists of two small structures: Compressor House 1 and Compressor House 2. The Compressor House Area houses large air compressors and associated equipment for plant operations. Plant personnel were unaware of the date of construction, however, the Compressor House is identified on the 1941 Sanborn map.

Compressor House 1 is an enclosed corrugated metal building with concrete floors and access doors on the south and west sides (see Photo 13, Appendix B). During site reconnaissance, two large air compressors were observed inside the building with dark staining under and around the air compressors. Adsorbent pads were on the ground in one area where the ground was visibly discolored and oily. Five 55-gallon drums were located inside the east doorway, three of which were labeled ‘used oil’ or ‘used oil filters’, one was labeled ‘litter’ and the other was empty. In addition, a drum was located next to each of the two compressors that hooked up to the compressors and contained oil. Staining was observed around these drums. An air tank above ground storage tank was located outside on the east side of the building.

A backup air compressor was observed outside of Compressor House 1 to the north. The backup air compressor is tire-mounted in a dirt area. Some staining was observed underneath the backup air compressor.

Compressor House 2 is a smaller corrugated metal structure divided into two sections by 4-foot wood wall, open on the west side. Each section has concrete floor and cement berm on three sides. The south portion of Compressor House 2 contains 55-gallon drums labeled used oil, and one small drum labeled 'old filters' (see Photo 14, Appendix B). Staining was observed on the floor of the southern section. The northern section of Compressor House 2 was empty during site reconnaissance. Dark staining and discoloration was observed in the central area of the northern section.
A small shed was located to the north of the Compressor House 2. The shed is constructed of corrugated metal, approximately 15-feet by 15-feet in length. A 12-inch metal pipe exits the ground, enters and exits the shed, and re-enters the grounds. A large metal tank with an air pressure gauge is housed inside the shed above the 12-inch pipe. Staining on the floor was observed during site reconnaissance.

During site reconnaissance, three overhead transformers were located south of Compressor House 2.

No suspect asbestos-containing materials were observed by TRC during the interior site inspection (a preliminary visual survey of readily visible construction materials).

5.2.13 Machine Shop

The Machine Shop is approximately 300-feet by 200-feet in length and is located in the east portion of Parcel 3. According to plant personnel, the original Machine Shop burned down in 1908 and the existing building was constructed shortly thereafter. The Machine Shop is a wood building, painted on the exterior, with a concrete floor. A discussion with plant personnel revealed the original wood floor was replaced with concrete in the 1950s. According to plant personnel, substances used and/or stored in the Machine Shop include solvents, lube oil, used oil, heating coolant, and paint. A detail of the Machine Shop is shown in Figure 5.3.

Review of site documentation revealed that 40-gallons of petroleum solvent has been stored in the north portion of the building and oxygen (3,372 cubic feet) and acetylene (1,500 cubic feet) have been stored in the south portion of the building. In addition, a storage shed outside the Machine Shop to the north has contained heating oil, lube oil, cutting fluid, and used oil.

During site reconnaissance, dark staining was observed at a location along southwest corner of the building. According to plant personnel, when the oil separator in the air compressor gets clogged, an amount of oil gets blown out of the pipe overflow and subsequently directly to the ground surface (asphalt and dirt) (see Photo 15, Appendix B).

The Machine Shop contains machinery, tools, and associated mechanical equipment. The concrete floor is discolored with dark stained areas around some equipment. An approximately 1.5-foot by 1.5-foot sump filled with adsorbent pads is located in the

center of the floor (see Photo 16, Appendix B). According to Russell Saari, plant machinist, the sump used to drain directly to the ground but is no longer in use.

During the site assessment, a small patched portion of flooring was observed in the building south of the sump. Upon inquiring about the patched floor, Mr. Saari explained that a piece of equipment formerly housed at that location continued to collide with the floor at that spot. Over time, the concrete was worn away and the ground was exposed for an unknown period of time. In addition, another small patched portion of flooring was observed in the north portion of the building. Mr. Saari recalled that location was open to the ground at some point. Further information about that location was not known.

Several small containers of oil were noticed in various locations of the Machine Shop during site inspection. The east portion of the building is used for office and storage space. According to plant personnel, this area was formerly used for oil storage and paint.

During site interior investigation of readily visible construction material, TRC noted insulation on steam pipes that is suspect ACM. Based on the date of construction (prior to 1964), the building may contain areas with lead based paint.

Outside the Machine Shop to the north is used for metal parts storage and a storage shed. The ground is asphalt, no staining was observed during inspection. The storage shed is constructed of a concrete base with metal grating and wood walls and roof, open on one side. Containers inside the storage shed hold used oil, according to Mr. Heitmeyer.

5.2.14 Sheet Metal/Plumbing and Plant Supply

The Sheet Metal/Plumbing and Plant Supply building was constructed around 1978. The L-shaped building is located directly south of the Machine Shop and, although not adjoining, was built as an extension to the Machine Shop. The building is constructed of corrugated metal with concrete flooring. The west portion of the building contains sheet metal, and plumbing operations. The east portion of the building, Plant Supply, has a separate entrance and is used for storage of various parts and accessories for plant operations. A detail of Sheet Metal/Plumbing and Plant Supply is shown in Figure 5.3.

During site reconnaissance, dark staining was observed at a location along the north side of the Sheet Metal/Plumbing portion of the building. Similar to staining noted in Section 5.2.13, according to plant personnel, when the oil separator in the air compressor gets clogged, an amount of oil gets blown out of the pipe overflow and subsequently directly to the ground surface (asphalt and dirt).

The majority of the Sheet Metal/Plumbing portion of the building (approximately 400-feet by 100-feet) contains various mechanical equipment, tool storage, and various parts storage (metal, plastic, rubber). During the site reconnaissance, some floor staining

was observed in the northern area where various equipment is housed. The concrete floor is cracked at various locations throughout this portion of the building. In the northwest area, a metal container of oil was noted, approximately 1.5-feet by 4-feet in length and 1-foot in depth (see Photo 17, Appendix B). Staining was present around the metal oil container. Review of site documentation revealed previous storage of 10-gallons of petroleum solvent in this area and oxygen (281 cubic feet) and acetylene (110 cubic feet) in the south area. A small container of hydrochloric acid (approximately one liter) was located in the west portion of the Sheet Metal Shop.

The Plant Supply, east portion of the building, is a large warehouse approximately 200-feet by 400-feet. During site reconnaissance, several rows of various parts and small equipment was observed in the Plant Supply. Two 1-gallon buckets of lithium and nicad batteries and fluorescent lights are located in the south area. One 55-gallon drum of cleaner/degreaser was located in the northeast area. According to plant personnel, it was mistakenly delivered to G-P and personnel are in the process of its removal. Several paint spray cans were located in a locked cabinet in the northwest corner of Plant Supply. No staining was observed in the Plant Supply.

A locked wire storage shed with a corrugated metal roof is located outside Plant Supply to the south. The shed contains pressurized containers of oxygen, argon, and carbon dioxide. In addition, nine 55-gallon plastic drums were noted outside Plant Supply to the south (see Photo 18, Appendix B). The outside area is asphalt.

During the interior inspection of the Sheet Metal/Plumbing and Plant Supply building, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Additionally, due to the date of construction (1978), the building probably does not contain areas with lead based paints. The U.S. Consumer Protection Safety Commission banned lead based paints in 1978.

### 5.2.15 Training Center

The Training Center is a small two room building located in the east portion of Parcel 3 used for employee training and meetings. The Training Center is a wood building constructed in the early 1990s. The site assessment did not reveal environmental concerns associated with the Training Center.

### 5.2.16 Covered Shed

During site reconnaissance, a covered shed was discovered in the east area of Parcel 3, north of the Training Center. The shed has a corrugated metal roof with metal support over a concrete pad (no walls). Metal parts, large piping, and motors were observed on the concrete pad during the assessment. Plant personnel were unaware of the construction date of the structure. Historical aerial photographs indicate the shed was built in the 1980s or 1990s. Review of site documentation indicate the storage of

2,500 gallons of lubricant stored in 55-gallon drums and storage of 110 gallons of paint thinner waste in the area of the Covered Shed. It is unclear if the storage was within the Covered Shed.

## 5.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, 1982, and 1999. The key findings from this review are provided in the following section.

1952 and 1957

In the 1952 and 1957 aerial photographs, the Former Planer No. 1 and Former Mobile Equipment Shop exists. The west portion of Dry Shed No. 4 is evident and the Kilns buildings are in place. Although the Kilns themselves were constructed later in the 1950s, the Kilns building are visible in the photographs. The Machine Shop is visible as it exists today. Two small buildings to the south of the Machine Shop are visible. The 1957 photograph reveals the Construction Engineering building and Yard Office. No stains or other evidence of contamination was noted.

1963 and 1966

In the 1963 and 1966 aerial photos, Parcel 3 appears very similar to the previous years of coverage. However, the 1966 aerial photo covers only the southeastern portion of Parcel 3. In addition to the buildings in the previous photos, Planer No. 50 and a small building south of Former Planer No. 1 are visible. Site documentation indicate the small building was a transit shed. The 1966 photo reveals the southwest area of Planer No. 50 where darker colored ground is visible.

1973 and 1982

The buildings in Parcel 3 appear similar to previous years of coverage. Existing buildings still include the Yard Office, Planer No. 50, Former Planer No. 1, Dry Shed No. 4 and Dry Shed No. 5, Former Mobile Equipment Shop, Construction Engineering, Kilns, and the Machine Shop. The transit shed is visible. Dry Shed No. 4 is visible in both photos as it exists today, including the east portion of the building not seen in previous photos. Darker areas of the ground visible in the 1973 photo include roadways and transportation routes throughout Parcel 3. In addition to the aforementioned, the Truck Loading Shed, the Compressor House, and the Sheet Metal/Plumbing and Plant Supply building is shown in the 1982 photo as it exists today. Previous photos do not clearly indicate the presence/absence of the Compressor House prior to 1982.

1999

Most of the photos shown in the 1982 aerial photo are visible in the 1999 photo with some exceptions. Former Planer No. 1 and the transit shed are not shown. The Scrap Yard is visible as it exists today. The ground in the south-central portion of Parcel 3 appears darker than the rest of the Parcel. The Railroad Spurs are visible in the 1999 photo.

## 5.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received four Sanborn maps, from the years 1898, 1909, 1919, and 1941,which contained coverage of Parcel 3. The key findings from the review of each year of Sanborn map coverage is provided in the following section. Copies of Sanborn Maps are included in Appendix E.

1898

In the 1898 Sanborn map, the machine shop is shown at the location it exists today as a building with different dimensions. A blacksmith and carpentry shop building is located adjacent to the south of the Machine Shop. No other buildings are identified in Parcel 3 area. In addition, a well designated as "Z" appears to be located in the southern area of Parcel 3.

1909

Parcel 3 in the 1909 Sanborn map shows additional development. The machine shop, blacksmith, and carpentry shop are now three separate buildings as opposed to two building in the previous Sanborn. Dry kiln buildings are designated in the 1909 Sanborn. The dry kilns are shown more elongated than the square shape of the current buildings. Iron condensers and a coil blower fan are indicated in the south central area of Parcel 3. The planning mill and associated engine is shown at what appears to be the approximate location of Planer No. 50. A dry lumber storage building is shown in the approximate location of the Truck Loading Shed. An additional shed is indicated in the southwest corner of Parcel 3.

1919

Parcel 3 in the 1919 Sanborn appears similar as it did in the 1909 Sanborn The machine shop, blacksmith, carpentry shop, planning mill, and dry lumber storage are similarly identified. The dry kilns are in the same location but building dimensions and sizes appear altered. Additional sheds and small buildings are shown in Parcel 3 without identification. A structure marked "coal storage" is located west of the machine shop. An engine is shown south of the dry kilns.

1941

Several new features are found in Parcel 3 on the 1941 Sanborn map. An electrician shop is shown north of the machine shop and a garage is located east of the machine shop. The dry kilns occupy a portion of the location shown in previous Sanborns. Three engines are located west of the kilns. A 30,000-gallon water tank is located further west of the kilns. Saw, shingle, and planning mills occupy the central area of Parcel 3. A structure marked "powder house" is located in the southwest corner of Parcel 3 adjacent to the ocean. The machine shop, blacksmith, carpentry shop all appear the same.

## 5.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. In the 1943 USGS map, a railroad spur is shown in the north-south direction in what appears to be the same area as the current railroad spur west of Former Planer No. 1. Also the railroad is shown in the north-south direction along the east edge of Parcel 3. These railroads are shown consistently in the 1960 and 1978 USGS maps.

The topographic maps show building locations. In the 1943 USGS map, buildings that are shown do not clearly correspond to known historical buildings. The 1960 USGS maps show buildings in locations that correspond with Former Planer No. 1, Yard Office, Kilns, Construction Engineering, Dry Shed No. 4 and Dry Shed No. 5, and Former Mobile Equipment Shop. The 1978 USGS map is similar to the 1960 USGS maps. In addition, the Truck Loading Shed and Planer No. 50 are shown. Other markings on the USGS maps do not necessarily correspond with known buildings.

## 5.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. Files pertaining to the California Western Railroad Site, located at the foot of Laurel Street in Fort Bragg, California, were reviewed. The files provided by the RWQCB contained Annual Storm Water Discharge Reports associated with industrial activities. The reports do not contain relevant information in regards to the potential environmental concerns for Parcel 3.

Files were reviewed pertaining to the gas station located at 225 North Main Street, adjacent to the east of Parcel 3. Records indicate waste oil and gasoline USTs were removed in 1998 and 1999 and contamination was evident. Groundwater monitoring analytical data indicates the presence of petroleum hydrocarbon related contaminants, including MTBE, in monitoring wells. Consultants for Tosco Corporation, listed as the responsible party, submitted a workplan in July 2002 to conduct activities to evaluate remedial alternatives.

## 5.7 Site Records Review

During the site visit conducted for Parcel 3, on-site records were reviewed for information regarding Parcel 3. The following presents a summary of our findings.

During site reconnaissance activities the Spill Prevention, Control, and Countermeasure Plan (SPCC) for the Fort Bragg Facility was reviewed. The SPCC was originally prepared in 1993 with revisions in 1997, 1998, and 1999. The SPCC indicates approximately 200 gallons of enamel paint and 600 gallons of latex paint are stored in 1- and 5-gallon containers in the building. The SPCC also indicates a product distribution area (in the area of the Covered Shed discussed in Section 3.2.16) containing 2,500 gallons lubricant stored in 55-gallon drums. In addition, the SPCC indicates 110 gallons of paint thinner waste was stored adjacent (northwest) of the distribution area.

## 5.8 Electrical Transformers

During site reconnaissance activities a visual survey and historical records search was conducted on Parcel 3 for the presence of electrical transformers. As described in Section 3.2, transformers currently or historically reside at nine different locations within Parcel 3.

Eleven empty transformers are currently stored in the Truck Loading Shed. According to Mr. Heitmeyer, empty transformers have been stored at that location in the Truck Loading Shed for approximately six months (since early 2002). Overhead transformers are located outside the southeast corner of Planer No. 50. Two transformer pads are located along the northern area of Former Planer No. 1, and one overhead transformer is located in the southwest corner of Former Planer No. 1. According to Mr. Heitmeyer, overhead transformers used to be located in the southeast corner of Former Planer No. 1. Some small transformers were located in the Construction Engineering storage area. A transformer pad is located in the Kilns Area containing one transformer. Three overhead transformers are located on the north side of the Compressor House. According to Mr. Heitmeyer all transformers currently on the facility are PCB free (containing less than 50 milligrams per kilogram PCBs).

Additionally, a Transformers Inspection and Maintenance Log was reviewed. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the facility. Although the log does not specify the exact location of each transformer it does give a general location. The Log indicates three pad mounted transformers at the Compressor House. The Log also indicates pole-mounted transformers north of Dry Shed No. 4, three east of Planer No. 50, three on the west side of Compressor House, and two at the Kilns.

## 5.9 Suspected Asbestos Containing Materials

During internal inspections of the buildings present on Parcel 3, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. The following areas were identified to contain suspect ACM:

- Building materials in Planer No. 50
- Tiles and building materials in Yard Office
- Tiles and building materials in Construction Engineering
- Insulation on steam pipes and building materials in Kilns
- Building materials in kiln office
- Insulation on steam pipes and building materials in Machine Shop

## 5.10 Lead Based Paint

A preliminary visual lead based paint screening survey was conducted of the structures located on Parcel 3. Due to the date of their construction the following buildings were identified to potentially contain lead based paint:

| Building | Approximate Construction Date |
|---|---|
| Truck Loading Shed | Early 1970s |
| Planer No. 50 | Late 1950s – Early 1960s |
| Dry Shed No. 4 | 1960s |
| Dry Shed No. 5 | Pre-1950s |
| Yard Office | Mid-1950s |
| Construction Engineering | Mid-1950s |
| Kilns | Early 1950s |
| Kiln Office | Late 1950s – Early 1960s |
| Compressor House | Unknown |
| Machine Shop | Late 1900s |

## 5.11 Conclusions and Recommendations

### 5.11.1 Summary of Parcel 3 Findings

During site reconnaissance activities of Parcel 3 for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 3:

- The Scrap Yard has been in existence since approximately 1995. Various debris were present during site reconnaissance in the Scrap Yard area, at the cliff edge and in the surf below. Observed debris included metal and plastic materials, engine blocks and transformer pieces. This area has since been cleaned up.

- Railroad spurs adjacent and west of Former Planer No.1 were used to load and unload rail cars. Locomotives resided along these railroad spurs to unhook and hookup with the railcars.

- The Yard Office was constructed in the mid-1950s. Due to construction date, building materials (including floor tiles) are suspect ACM. In addition, paint is suspected to be lead based.

- Planer No.50 was constructed in the late 1950s to early 1960s. Due to the date of construction, building materials are suspect ACM and paint is suspected to be lead based. An overhead transformer was observed outside the southeast corner of the building.

- Former Planer No. 1 was constructed prior to early 1950s and demolished in late 1990s. Stained sand and stained wood were observed in two concrete lined sand equipment foundations in the northeast area.

- A former oil drum storage containment is located in the southeast corner of Former Planer No.1. Standing liquid with minor petroleum odor was observed in concrete containment during site reconnaissance.

- Two concrete transformer pads (each containing three transformers) are located along the northern side of Former Planer No. 1. An overhead transformer was observed in the southwest corner of Former Planer No. 1 and overhead transformers were previously located at the southeast corner.

- Staining was observed on a concrete pad, located southeast of Planer No. 50, which formerly contained an air compressor. G-P personnel were unaware of the date of pad construction and period of compressor usage.

- Dry Shed No. 4 was constructed prior to the early 1950s (west portion) and extended in 1978 (east portion). Paint is suspected to be lead based. G-P personnel indicated the northwest corner was used to store transformers in an open shed on a dirt floor prior to the early 1990s.

- A wood preservative dip tank set into the ground, located outside the northwest corner of Dry Shed No. 4, was abandoned in place.

- Dry Shed No. 5 was constructed prior to early 1950s and may contain lead based paint.

- Currently undeveloped, a Mobile Equipment Shop (two buildings) was located in the northeast corner of Parcel 3, constructed in the late 1960s to early 1970s and demolished in late 1980s to early 1990s. The buildings were used for automobile and equipment repair, fuel dispensing, equipment storage and equipment wash. A catch basin and concrete sump were observed with standing liquid during site reconnaissance. Surface staining was observed in the area. In addition, a metal pipe protruding from the south building foundation ran along the ground for a short distance. Discolored soil with hydrocarbon odor was observed in the end of the pipe. Additional information and pipe history was unknown to G-P personnel.

- Railroad mechanical operations are located offsite and adjacent to the area east of the Former Mobile Equipment Shop.

- Construction Engineering Building was built in the mid-1950s and consists of storage areas and offices. Based on site reconnaissance and document review, materials currently and/or previously stored in Construction Engineering include metal parts, various equipment, tools, small transformers, paint, thinners, enamels, solvents. Several 5-gallon buckets without lids were observed during site reconnaissance containing substances unknown to G-P personnel. Due to the date of construction, the building may contain suspect ACM in building materials (including tiles) and lead based paint.

- Review of site documentation indicate used paint thinner was stored in the portable shed located west of Construction Engineering.

- Buildings associated with the Kilns were constructed in the 1950s. Suspect ACM was observed in steam pipe insulation. Due to the date of construction, the buildings may contain lead based paint. Transformer boxes were observed on the south side of the kilns. A lube oil storage shed is located between the kiln buildings.

- Large air compressors, associated equipment, and oil are located in the Compressor House 1 and Compressor House 2. Staining was observed around the air compressors and around drums of oil in both buildings. Staining on the dirt was observed underneath the backup air compressor located outside Compressor House 1. Three overhead transformers were observed south of Compressor House 2. Because construction dates of the buildings are unknown, paint is suspected to be lead based.

- The Machine Shop was rebuilt after a fire demolished the original building in 1908. Substances used/stored in the Machine Shop include lube oil, used oil, heating coolant, paint, petroleum solvent, pressurized oxygen and pressurized acetylene. The wood floor was replaced with concrete in 1950s. Dark staining was observed in various areas inside the Machine Shop and a small sump filled

with adsorbent pads was located in the center of the floor. G-P personnel indicated the sump (no longer in use) previously used to drain directly to the ground. Due to the date of construction, the building may contain lead based paint. Insulation on steam pipes are suspect ACM.

- A concrete-based storage shed outside the Machine Shop houses containers of used oil.

- Dark staining was observed outside the Machine Shop on the southwest corner of the building and at a location along the north side of the Sheet Metal/Plumbing building. G-P personnel explained the staining was oil blown out of the compressed air line due to clogging.

- The Sheet Metal/Plumbing and Plant Supply building was constructed around 1978. Cracks and staining were observed in various floor areas of the Sheet Metal/Plumbing portion of the building. Staining was observed around a metal container with oil. Review of site documentation revealed previous storage of petroleum solvents in this area.

- Review of site documentation indicate the storage of 2,500 gallons of lubricant stored in 55-gallon drums and storage of 110 gallons of paint thinner waste in the area of the Covered Shed. It is unclear if the storage was within the Covered Shed.

### 5.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate Scrap Yard area for debris-related contaminants including metals, PCBs, petroleum hydrocarbons and VOCs.

- Investigate railroad spurs for hydrocarbons, metals, and SVOCs from locomotives and railroad ties.

- Investigate the soils at the overhead transformer area at southeast corner of Planer No. 50 for possible PCBs.

- Remove the stained sand and wood from the equipment foundations at Former Planer No. 1. Investigate the soil below the foundations for solvents.

- Characterize and remove (i.e., dispose of) residual liquid in former oil drum storage containment and investigate soils around and underneath the containment at the southeast corner of Former Planer No. 1.

- Investigate the soils for PCBs around and underneath transformer pads along the northern side of Former Planer No. 1 and at the former overhead transformer location in the southeast corner.

- Investigate northwest corner of Dry Shed No. 4 where transformers were previously stored for possible presence of PCBs.

- Investigate outside the northwest corner of Dry Shed No. 4 at the dip tank for possible presence of SVOCs.

- Characterize and remove (i.e., dispose of) residual liquid in the catch basin and concrete sump at the Former Mobile Equipment Shop area. Also investigate soils in the area and underneath existing building foundations and piping with hydrocarbon odors for PCBs, VOCs and petroleum hydrocarbons.

- Investigate soils east of the Former Mobile Equipment Shop for possible petroleum hydrocarbons.

- Investigate Construction Engineering storage areas related to paint, thinners, solvents, PCBs, petroleum hydrocarbons and metals.

- Investigate portable shed by Construction Engineering previously used for storing used paint thinner for solvents and petroleum hydrocarbons.

- Investigate soils around and underneath transformer boxes south of the kilns for possible presence of PCBs.

- Investigate Compressor House area for hydrocarbons, and soils underneath overhead transformer (south of Compressor House) for presence of PCBs.

- Investigate Machine Shop, nearby shed, Sheet Metal/Plumbing, and Covered Shed for solvents and petroleum hydrocarbons.

- Perform survey for ACM on building materials in Planer No. 50, tiles and building materials in Yard Office, tiles and building materials in Construction Engineering, insulation on steam pipes, and building materials in Kilns, kiln office, and Machine Shop.

- Perform lead based paint survey on Truck Loading Shed, Planer No. 50, Dry Shed No. 4, Dry Shed No. 5, Yard Office, Construction Engineering, Kilns, Kiln Office, Compressor House, and Machine Shop.

# 6.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 4

## 6.1 Subject Parcel

The area designated as Parcel 4, Power House, is an approximately 12.5-acre plot of land located along the west-central portion of the G-P Facility (Figure 2). Parcel 4 was subsequently divided into thirteen areas of interest (4.1 through 4.12) identified during site reconnaissance activities (Figure 6.1). The identified areas of interest in Parcel 4 are designated as Power House Fuel Storage, Former Bunker Fuel ASTs, Water Treatment Plant, North Settling Pond, Collection Pond, South Settling Pond, Fuel Barn, Power House, Transformers, Oil Storage Shed, Press Building, Cooling Towers, and Log Pond.

Historical photos, Sanborn maps, and interviews suggest that the fuel barn and power house were constructed prior to the early 1950s. The former bunker fuel ASTs were installed approximately in the 1950s and demolished in 1996. The water treatment plant and cooling towers were constructed and operational in the mid-1970s. The power house fuel storage shed was constructed in the 1990s. Appendix D contains documents obtained during agency and site file reviews.

Historical aerial photos indicate that, although the shape and size has varied over the years, the north settling pond and collection pond have existed since the early 1970s (see Figure 6.1).

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 6.2 Site Inspection

TRC conducted the physical site inspection of Parcel 4 on November 5, 2002. Information related to Parcel 4 was obtained through interviews with Mr. Richard Benedetti and Mr. Doug Heitmeyer, and Mr. Paul Johnson, employees of Georgia Pacific. Mr. Richard Benedetti was the Western Group Manager, and a third generation employee at the facility, and is currently retired. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years. Mr. Paul Johnson is a Fort Bragg resident and an employee of the Sawmill for approximately 40 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 6.2.1 Power House Fuel Storage

The Power House Fuel Storage is located on the northern edge of Parcel 4. Constructed in the 1995, the Power House Fuel Storage is a corrugated metal building open on the north and east sides with concrete floor and berm (secondary containment) and overhead lighting. The building houses 3-10,000 gallon horizontal above ground storage tanks (ASTs), containing reserve fuel oil (RS 300). Until 1996, one 10,000 gallon AST contained jet fuel for helicopters that used to fly into the Site. A sump is located on the north side of the building (outside the berm). According to plant personnel, the tanks currently hold approximately 2,200 gallons collectively. Secondary containment piping exits the building on the west side and runs underground to the Power House.

Approximately 4,000 gallons of fuel spilled in the Power House Fuel Storage in May 1999, according to plant personnel. Apparently the spill occurred entirely within the secondary containment and was subsequently cleaned up. Document review revealed no information regarding the spill.

In addition, a 30,000 gallon water tower is located on the west side of the Power House Fuel Storage building. The tower is constructed of wood on a concrete base.

During the interior inspection of the Power House Fuel Storage building, a preliminary visual survey was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Additionally, due to the date of construction (after 1978), the Site building probably does not contain areas with lead-based paints. The U.S. Consumer Protection Safety Commission banned lead-based paints in 1978.

### 6.2.2 Former Bunker Fuel ASTs

Two bunker fuel (RS 400) ASTs with secondary containment were previously located south of the Power House Fuel Storage. Plant personnel recall the ASTs were within concrete secondary containment that had cracks and was not in “good” condition. During plant operations, bunker fuel was used as a backup fuel source. The steel 25,000 and 20,000 gallon bunker ASTs were installed in the 1950s (estimated by plant personnel) and removed in 1996. According to plant personnel, the facility began using a new backup fuel source and installed double contained fuel piping. The bunker fuel was transported via railcar to the north side of the ASTs. It is unknown if the railroad tracks were removed and site assessment did not reveal their presence. Plant personnel indicate the underground piping associated with the bunker fuel ASTs was not removed and remains in place.

The former bunker fuel AST location is currently vacant, abundant with weeds and vegetation. During the site reconnaissance, the ground surface was not visible, though no staining was noted.

### 6.2.3 Water Treatment Plant

The Water Treatment Plant is located south of the Power House Fuel Storage and water tower on Parcel 4. During plant operations, the water treatment plant treated water used for the cooling towers to prevent corrosion and scaling. The Water Treatment Plant, visible in the 1982 aerial photograph, began operation in the mid-1970s and is approximately 100-feet by 200-feet in length, constructed of corrugated metal with concrete flooring (some cracking) and overhead lighting.

The Water Treatment Plant houses two treatment tanks, each consisting of a mixing tank, clarifier and additional settling tank. During site reconnaissance, sludge was present at the bottom of the clarifiers and settling tanks.

Chemicals found in the Water Treatment Plant during site inspection include liquid chlorine (350 gallon poly tank nearly empty), Alum (approximately 250 gallon tank in secondary containment), caustic soda (350 gallon tank in secondary containment and two 55 gallon drums), and ammonium chloride. Review of site records also indicate presence of sodium hypochlorite (500+ gallons) and sodium hydroxide (350 gallons) not noted during site visit.

Two air compressors are located inside the north side of the building. Floor staining was observed around the compressors. In addition, floor staining was noted on the east and west sides of the treatment tanks.

A concrete AST, approximately 4 feet in diameter and 15 feet in height is located on the south side of the Water Treatment Plant. Plant personnel were unaware of its contents or use. It may have been used as a treated water supply for the power plant.

A 4,000 gallon AST containing alum is located approximately 300 feet northwest of the Water Treatment Plant. The alum poly tank is in secondary containment and is used for water treatment.

The chip truck dump ramp is located south east of the water treatment plant. Review of site records indicate a hydraulic unit building next to the dump ramp.

During the site reconnaissance, a transformer was located inside the building in the northwest area. Suspect asbestos containing material was not observed based on TRC's preliminary visual inspection of readily available building materials. However, due to the unknown date of construction of the hydraulic unit building, suspect ACM may be present. Due to the estimated date of construction (mid-1970s), the water treatment plant and hydraulic unit building may contain lead based paint.

### 6.2.4 North Settling Pond

During the site visit, a small pond was observed on the west area of Parcel 4. The pond contained some water and thick vegetation. The setting pond is visible in the 1973 aerial photograph. Plant personnel indicate the pond was formerly used as a settling pond for a hydraulic de-barker and has not been used "for many years". Wet fly ash was brought to this area to dewater and subsequently sent offsite when it was dry. During the site visit, ash was visible on the ground surface in this area.

### 6.2.5 Collection Pond

A collection pond is located on the west area of Parcel 4, south of the small settling pond. The collection pond is visible in the 1973 aerial photograph. During the site visit, Mr. Heitmeyer indicated the pond is essentially a low-spot where stormwater naturally collects and evaporates. Sediments within the stormwater runoff therefore settle within this pond. According to Mr. Heitmeyer, during plant operations, when the pond reached capacity, the water was pumped to the water ponds and aeration ponds. During the site visit, the pond was approximately 2 feet deep with some vegetation.

East of the collection pond is the wood chip fuel pile. During plant operation, wood chips were stored here prior to transport into the fuel barn. According to plant personnel, ash was not stored or transported in this area. Environmental concerns were not identified in the wood chip fuel pile area.

### 6.2.6 South Settling Pond

A larger settling pond is located southeast of the collection pond in the south area of Parcel 4. According to site personnel, the scrubber effluent was pumped to the south-settling pond. The scrubber effluent contains detectable levels of cyanide. During the site visit, a slight sheen was observed in the west area and east area of the south-settling pond. Three overhead transformers were observed west of the south-settling pond. Due to the age of the plant, there is a potential for impacts to soil in the vicinity of these transformers. Stained soils were not observed in the pond area.

### 6.2.7 Fuel Barn

The Fuel Barn is located in the central area of Parcel 4. The Fuel Barn is fully enclosed, built prior to 1950s, and is constructed of corrugated metal. The Fuel Barn is visible in the 1952 aerial photograph. During plant operations, the fuel for the Power House (wood chips) was transported from the wood chip pile (west of the Fuel Barn) and stored in the Fuel Barn. A fuel digger, located on the south area in the Fuel Barn, moved the wood chips onto a conveyor belt and into the Power House.

During the interior inspection of the Barn, a preliminary visual survey was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Due to the date of construction (pre-1950s), the building may contain lead based paint.

### 6.2.8 Power House

During operation, the Power House used residual wood chips from plant operations to generate power. During operations prior to early 1970s, the Power House burned wood chips in two brick ovens. Two boilers were later added a few years later. In the late 1970s, a third boiler was added and the brick ovens were no longer in use. The boilers are on the east side of the Power House. Three turbines are located in the northwest area of the building. The Power House has concrete floor throughout the facility with both corrugated metal and wood construction.

Based on review of site documentation, site reconnaissance, and interviews with plant personnel, chemicals used and stored in the Power House include:

- Grease
- Solvent
- Filter Oil
- Turbine Oil
- Automatic Transmission Fluid
- Formula SS CAT (Adjunet SS-CAT)
- Formula 94 (tri-sodium-nitrilo-tri-acetate)
- Mercury (contained within switches)

Review of site records indicate the presence of two hydraulic units (total containment 100 gallons), one each on the north and south side of the boilers on the fire deck area. Also site documentation indicate the presence of three turbine oil tanks (total containment 2100 gallons) beneath the floor grating between the east and west ends of the turbines. Several 1- and 5-gallon buckets of paint and a large pump are stored in a small wood shed with concrete flooring on the south side of the Power House. Also on the south side of the Power House were two poly 330 gallon ASTs containing water and sodium hydroxide. A transformer was observed next to the ASTs.

During inspection of the Power House, some cracking in the concrete floor at various locations was observed. Water pumps are located in the northeast area of the Power House. Some surface staining was observed around the water pumps. Staining was observed at various locations throughout the base of the Power House. The Control Room is located adjacent to the turbines in the Power House. The Control Room is an office-style room painted with floor tiles and overhead lighting.

A paint storage shed is located south of the Power House. The shed is constructed of wood with a concrete floor. During the site visit, staining was observed on the concrete floor of the shed. There is the potential for leakage to soils underneath the shed.

During the interior inspection of the Power House, a preliminary visual survey for lead and asbestos was performed by TRC. Pipes associated with the pump in the shed (south of Power House), piping outside the Power House on the south side, and some piping within the Power House contain insulation that is suspect ACM. The Control Room also contains suspect ACM in the building materials as the date of construction is unknown. Additionally, due to the date of construction, the building may contain areas with lead based paints.

### 6.2.9 Transformer Pad

A concrete pad with three large transformers is located on the north side of the Power House. The pad is approximately 20 feet by 40 feet in length and enclosed by a chain link fence. An additional transformer is located south east of the pad location within an open covered shed. Soil underneath these transformers may be impacted with PCBs.

### 6.2.10 Oil Storage Shed

An oil storage shed is located on the north side of the Power House. The shed, approximately 15 feet by 20 feet in length, is constructed of wood and has a concrete secondary containment base with expanded metal grating. Plant personnel indicate the shed was constructed in the late 1980s. During site reconnaissance, the shed contained 5-gallon containers and 55-gallon drums of lube oil, used oil, absorbent pads and filters. Residual liquid was observed in the secondary containment area. There is the potential for oil from secondary containment to leak to soils below.

### 6.2.11 Press Building

The press building previously contained a sugar cane press which was used to remove moisture from the bark for the hydraulic debarker. According to plant personnel, the building was constructed in the late 1960s or early 1970s. The sugar cane press operated in the late 1980s to early 1990s and was subsequently removed. The press building has a concrete foundation with wood walls.

During the site visit, some staining was observed in the former press area. An air compressor was observed in the north side of the building. Some staining was observed around the air compressor. In addition, diala oil (used for transformers) was stored in two 55 gallon drums in the east area of the building. Plant personnel indicate diala oil has been stored at this location for approximately three years.

### 6.2.12 Cooling Towers

The Cooling Towers are located south of the Power House, in the southeast area of Parcel 4. The Cooling Towers building (visible in the 1982 aerial photograph) was constructed and operational in the mid-1970s, according to plant personnel, and contains four cooling elements. The building sits on a concrete foundations and has corrugated metal walls on the east and west sides. The north and south sides of the building are screened with metal slats. Prior to 1970s the cooling towers were located west of the Log Pond.

A small storage shed is located east of the cooling towers. According to Mr. Heitmeyer, the shed was constructed in the mid-1970s. The shed is constructed of corrugated metal on concrete foundation. During site reconnaissance noted chemicals stored in the shed include ammonium chloride, sodium hypochlorite, and soda ash. Outside the shed to the east is an empty 330-gallon sulfuric acid poly tank on a concrete pad.

South of the shed are three poly tanks on a concrete pad. Based on site reconnaissance and review of site documentation, chemicals stored here include sodium hypochlorite, isopropanol, and Formula 222 (sodium molybdate). These are small quantities and should not pose a concern. There is potential for historical usage of water treatment chemicals that contained chromium in the former cooling towers and this area should be tested for chromium and hexavalant chromium.

### 6.2.13 Log Pond

The western portion of the Log Pond borders the south edge of Parcel 4. Although the entire Log Pond resides in both Parcels 4 and 5, only the western portion of the Log Pond is discussed in this section. See the detailed report of Parcel 5 for a discussion of the eastern portion of the Log Pond.

According to interviews with G-P personnel, historical aerial photograph reviews, and historical Sanborn maps; the Log Pond has been on the G-P facility since its inception. Based on historical Sanborn maps the shape and size of the Log Pond has changed a few times over the years. According to plant personnel, the western and southern end of the pond was filled in the early 1970s. The fill was brought in from borrow sources of native material in Parcel 1 to allow for renovation of Parcel 1.

The pond was previously used as a log pond and was recently used as a source of cooling water for the power plant. Review of site drainage maps indicate that the City of Fort Bragg storm drains empty into the Log Pond. Figure 6.2 shows the facility drainage system. Additionally, the Log Pond is part of the treatment process for the "scrubber" effluent. The scrubber effluent is pumped to a settling pond (located in Parcel 7), it is then pumped into an aeration pond, then to the fire pond, which then drains to the Log Pond. According to site interviews and agency documents, the scrubber effluent

contains detectable levels of cyanide. There is a potential for sediments to have been impacted as a result of past site operations. This area should be tested for cyanide, metal, polynuclear aeromatic hydrocarbons (PAHs), and petroleum hydrocarbons.

## 6.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained through EDR and other sources including City of Fort Bragg archives. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, 1982, and 1993. The key findings from this review are provided in the following section.

1952,1957, 1963, and 1966

In the 1952, 1957, 1963, and 1966 aerial photographs the power house, the fuel barn and the log pond (western portion) in Parcel 4 are visible. The southern boundary of the log pond extends further in the west and southeast direction than it does today. The power house and fuel barn appear as they exist today in these aerial photographs. No stains or other evidence of contamination was noted.

1973

In the 1973 aerial photo, the power house, the fuel barn and the log pond are all still visible and are very similar to the previous years of coverage. The southeast area of the log pond in Parcel 4 has been filled in and more closely represent existing conditions. The small settling pond and collection pond are visible and appear to be analogous to the existing settling and collection pond. No stains or other evidence of contamination was noted.

1982 and 1993

Parcel 4 in the 1982 aerial photos appears much as it did in the previous photos. The power house, the fuel barn and the log pond, settling pond, and collection pond are all still visible. The water treatment plant and cooling towers are visible in the 1982 aerial photo. The power house fuel storage is not shown in the 1993 photo or previous years. No stains or other evidence of contamination was noted.

## 6.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received four Sanborn maps, from the years 1898, 1909, 1919, and 1941,which contained coverage of Parcel 5. The key findings from the review of each year of Sanborn map coverage is provided in the following section. Copies of Sanborn Maps are included in Appendix E.

1890 and 1894

In the 1890 and 1894 Sanborn maps, only a portion of east Parcel 4 is shown. The area is indicated as lumber storage. Railroad tracks are shown in this area.

1898

In the 1898 Sanborn map, the majority of Parcel 4 remains lumber storage. The map indicates a shipyard cookhouse, an engine, and a shipyard drafting and tool room in the south area of Parcel 4. Railroad tracks are shown on Parcel 4.

1909

As in previous Sanborn maps, the 1909 Sanborn map indicates Parcel 4 is generally used as lumber storage with railroad tracks. The only building shown on the map is an oil house in the south area.

1919

Parcel 4 in the 1919 Sanborn shows additional development as it did in the 1909 Sanborn. The railroad tracks are similar to previous maps. The oil house is still shown in the south area. The new features include a pier into the ocean that has an emergency boiler near the shore. Also a board plant and dry kiln is shown east of the oil house.

1941

In the 1941 Sanborn map, Parcel 4 appears similar to the 1919 map. The board plant, dry kiln, and the pier appear the same. Most of Parcel 4 is still used for lumber storage with railroad tracks. However, the emergency boiler and oil house are not shown.

### 6.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. The log pond and buildings associated with the power house are present in the topographic maps reviewed. However, the shape of the log pond varies over time in the maps.

### 6.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. During the agency file review at the Regional Water Quality Control Board – North Coast Section (RWQCB), several exceedances of the discharge permit were noted for the Log Pond effluent. According to plant personnel and records

review, notices of violations were not issued. Further assessment is beyond the scope of this Phase I.

## 6.7 Site Records Review

During site reconnaissance activities conducted for Parcel 4, site records were reviewed. During the site records review the Spill Prevention, Control, and Countermeasure Plan (SPCC) for the Fort Bragg Facility was examined. The SPCC was originally prepared in 1993 with revisions in 1997, 1998, and 1999. The recent SPCC Plan indicates the following tanks in the powerhouse area:

- Three steel tanks of turbine oil with capacity of 635, 335, and 910 gallons (one for each turbine generator),
- One 240 gallon steel tank containing reserve turbine oil,
- One 276 gallon steel tank containing turbine oil, and
- One 290 gallon steel tank containing reserve lubricating oil.

The recent SPCC Plan indicates the three 10,000 gallon steel tanks containing reserve fuel oil. In addition, the 1993 SPCC indicates two ASTs: a 975 gallon steel waste oil tank north of the cooling towers and south of the fuel barn and a 500 gallon steel diesel tank north of the fuel barn (both with concrete secondary containment). An Operational Facility Diagram, showing USTs and ASTs locations, was included in Appendix B of the SPCC document. The diagram had been updated, during one of the SPCC revisions, to represent the removal of the ASTs. No records of the AST removals where found at the Site, RWQCB, or the Health Department.

The Storm Water Pollution Prevention Plan (SWPPP) revised in 1999 presents a chemical inventory. In addition to reserve fuel ASTs and turbine oil ASTs, the SWPPP indicates the following chemicals in the power house area:

- Liquid chlorine solution (1,000 gallons)
- Chelate polymer (2,000 gallons)
- Sodium metabisulfate (1,000 gallons)
- Condensate corrosion inhibiter (500 gallons)
- Sulfuric acid (3,000 pounds)
- Corrosion and scale inhibiter (1,000 gallons)
- Neutralizing amine (250 gallons)
- Dispersant (250 gallons)
- Oxygen scavenger (250 gallons)

The SWPPP indicates the following chemicals in the water treatment area:

- Liquid alum AST (4,000 gallons)
- Caustic soda AST (1,500 gallons)

## 6.8 Electrical Transformers

During site reconnaissance activities a visual survey and historical records search was conducted on Parcel 4 for the presence of electrical transformers. As described in Section 6.2.9, a transformer pad is located on the north side of the power house in Parcel 4 (Figure 6.1). Transformers are also located on the ground next to the oil storage shed. Another transformer on the ground was observed outside the south side of the power house. A transformer was located inside the water treatment plant. Additionally, three overhead transformers are located west of the south-settling pond. According to Mr. Heitmeyer all transformers currently on the facility are PCB free (< 50 parts per million PCBs). Transformer locations should be assessed for historical releases.

Additionally, a Transformers Inspection and Maintenance Log was reviewed. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the entire facility. Although the log does not specify the exact location of each transformer it does give a general location. According to the Maintenance log there were ten pad transformers located in the vicinity of the power house as of 1984.

## 6.9 Suspected Asbestos Containing Materials

During internal inspections of the buildings present on Parcel 4, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. The following areas were identified to contain suspect ACM:

- Building materials and steam line insulation in the power house, and
- Building materials in the hydraulic unit building.

## 6.10 Lead Based Paint

A preliminary visual lead-based paint screening survey was conducted of the structures located on Parcel 4. Due to the date of their construction the water treatment plant (constructed in the 1970s), the power house and fuel barn (constructed prior to the early 1950s), and the hydraulic unit building (constructed date unknown) were identified to potentially contain lead based paint.

## 6.11 Conclusions And Recommendations

### 6.11.1 Summary of Parcel 4 Findings

During site reconnaissance activities of Parcel 4 for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 4:

- Scrubber effluent was pumped to the South Settling Pond in the south area of Parcel 4. According to interviews and document review, scrubber effluent contains detectable levels of cyanide. During site assessment, a sheen was observed in the east and west ends of the South Settling Pond. There is potential for sediments to contain cyanide and metals.

- In the past, wet fly ash was transported to the North Settling Pond for dewatering. Detectable levels of cyanide and metals have been identified in fly ash.

- According to plant personnel, the Collection Pond is a natural low-spot that collects site storm water. There is a potential for stormwater sediments to contain petroleum hydrocarbons, cyanide, and metals form other area in and around Parcel 4.

- The Log Pond is part of the treatment process for the scrubber effluent. According to interviews and document review, scrubber effluent contains detectable levels of cyanide. There is potential for the pond sediments to contain cyanide and metals.

- The water treatment plant was constructed in the mid-1970s. During operation, the water treatment plant stores and uses chemicals to prevent cooling tower water from corrosion and scaling. Floor staining was observed around air compressors and the treatment tanks on concrete floors. Due to the concrete floor and the nature of the chemicals used at the water treatment plant, it is highly unlikely for the soils underneath to have been impacted as a result of site operations.

- A hydraulic unit building (for the chip truck dump ramp) is located southeast of the water treatment tanks. Soils underneath and around the hydraulic unit building may be impacted by petroleum hydrocarbons from hydraulic oil.

- The Press Building previously housed a sugar cane press to dewater wood fuel. An air compressor and 55-gallon drums of diala oil are located in the Press Building. Staining was observed on the concrete around the former press location and air compressor.

- The Cooling Towers were constructed in the current location in the mid-1970s. Various chemicals associated with water treatment are stored outside the east side of the Cooling Towers. These chemicals are fairly innocuous and should not pose a concern. However, presence or absence of chromium and hexavalant chromium can not be ruled out. Prior to 1970's Cooling towers were located west of the Log Pond.

- An oil storage shed is located on the north side of the Power House. During site reconnaissance, residual liquid was observed in the secondary containment area.

There is potential for leakage of oil from the secondary containment to the ground below.

- A small wood shed south of the Power House contains paint storage. Staining on the concrete floor from paint was evident. There is potential for leakage to soils underneath the shed.

- The Power House Fuel Storage is a shed constructed in 1995 housing three 10,000-gallon tanks in concrete secondary containment. The tanks hold reserve fuel for the power house. In May 1999, approximately 4,000 gallons of fuel spilled entirely within the secondary containment and was subsequently cleaned up. Soils underneath secondary containment may be impacted with petroleum hydrocarbons.

- Two steel ASTs (20,000- and 25,000-gallon capacity) containing bunker fuel were in operation from 1950s to 1996 south of the power house fuel storage. Plant personnel recall the steel ASTs in concrete secondary containment that was cracked. Plant personnel indicate underground piping associated with the bunker fuel remain in place. Bunker fuel was transported via rail car and plant personnel are unaware if the railroad tracks still exist in that location. Soils underneath and around the former bunker fuel ASTs and railroad tracks may be impacted with petroleum hydrocarbons.

- Various chemicals have been stored in several areas of the Power House. Two hydraulic units are located near the boilers. Six tanks containing turbine oil and lubricating oil are located in the Power House. The Power House may contain suspect ACM and lead based paint. Some older switches in the Power House may contain mercury. These switches should be identified and removed prior to plant demolition.

- A large transformer pad is located on the north side of the Power House. Other ground transformers are located next to the oil storage shed, outside the south side of the Power House, and inside the water treatment plant. Three overhead transformers are located west of the South Settling Pond. Due to the age of the plant, soil in the vicinity of the transformers may be impacted with PCBs.

### 6.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate sediments in and around the North Settling Pond, the Collection Pond, the South Settling Pond, and the Log Pond for possible metals and cyanide,

polynuclear aeromatic hydrocarbons (PAHs), and petroleum hydrocarbon impacted areas.

- Investigate the following areas for possible petroleum hydrocarbons:
  - Power House Fuel Storage
  - Former Bunker Fuel ASTs and associated railroad track area
  - Piping from the Bunker Fuel ASTs to the Power Plant
  - Collection Pond
  - South Settling Pond
  - Press Building
  - Hydraulic Unit Building
  - Oil Storage Shed

- Investigate areas surrounding transformer pad, other transformers on the ground, and overhead transformers for possible PCBs.

- Characterize soils and sludge for metals and solvents in the following area:
  - Power House

- Investigate soils around and underneath Paint Storage Shed for solvents.

- Perform lead based paint and ACM survey on the Water Treatment Plant, Power House, Fuel Barn, and Hydraulic Unit Building.

- Investigate presence of tracks and piping in the former Bunker Fuel area to locate the track and the fuel and piping and investigate for the presence of petroleum hydrocarbons.

- Investigate the former and current location of the cooling towers for chromium and hexavalant chromium.

# 7.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 5

## 7.1 Subject Parcel

The area designated as Parcel 5, Sawmill No. 1, is an approximately 21-acre plot of land located along the eastern portion of the G-P Facility (figure 2). Parcel 5 was subsequently divided into thirteen areas of interest (5.1 through 5.13) identified during site reconnaissance activities (Figure 7.1). The identified areas of interest in Parcel 5 are designated as Sawmill No. 1, Log Pond, old diesel concrete pad, underground lines to fuel area, area west of Mobile Equipment Shop, transformer pad, possible diesel AST, Washdown Building, Tire Shop, Mobile Equipment Shop, Fuel Storage and Dispenser Building, office buildings, and the Service Station.

Historical photos, Sanborn maps, and interviews suggest that Sawmill No. 1 was constructed in the late 1880s. The Mobile Equipment Shop was constructed in the late 1940s; the office buildings, located along Highway 1, were constructed between the late 1950s and the early 1970s; and the Tire Shop and Fuel Storage and Dispenser Building were constructed in the late 1980s to early 1990s. The service station located at 105 South Main Street, has been in operation since the 1960s, according to the *Supplemental Plume Delineation Workplan,* dated February 26, 2001, by Laco Associates. Appendix D contains documents obtained during agency and site file reviews.

Historical aerial photos and Sanborn maps indicated that, although the shape and size has varied over the years, the Log Pond has been present on Parcel 5 since the late 1880s. The transformer pad (located near the small pond on the eastern portion of the parcel) was first identified on the 1941 historical Sanborn map.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 7.2 Site Inspection

TRC conducted the physical site inspection of Parcel 5 on August 11, 2002, September 12, 2002, and October 16, 2002. Information related to Parcel 5 was obtained through interviews with Mr. Richard Benedetti and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr. Michael Woody was present to allow access to the Site. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility, and is currently retired. Mr. Michael Woody is currently the West Coast Regional Environmental Resources Manager. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are

further described below. Photographs in Appendix C present views of the identified areas of interest.

### 7.2.1 Sawmill No. 1

Sawmill No. 1 was previously located on the northwest portion of Parcel 5 (Figure 7.1). According to interviews with G-P personnel, historical aerial photograph reviews, and historical Sanborn maps; Sawmill No. 1 was constructed in the 1880s and was subsequently demolished in 1998. Currently, the area formerly occupied by Sawmill No. 1 remains undeveloped. The foundation of the building still remains.

In April 1998 TRC performed a preliminary investigation to evaluate coatings (paint) on selected buildings and to determine if contaminants associated with prior Site operations are present in subsurface soils in the areas that were scheduled for demolition. As part of the investigation a certified lead inspector/risk assessor conducted an inspection on the Sawmill building. Additionally, TRC collected two soil samples from 14 locations in and around Sawmill No. 1. Two subsurface samples were collected: one at 0.5 feet below grade and one at 2.5 to 3.5 feet below grade. Soil samples were analyzed for PCBs, TPH as diesel, and TPH as motor oil.

The lead survey report recommended that since the majority of painted surfaces were found to have lead levels below the HUD guideline, paint chips and debris generated during building demolition are not likely to contain hazardous levels of lead.

No soil samples analyzed contained detectable concentrations of PCBs. TPH as diesel concentrations ranged from 4,200 mg/kg (southwest end of Sawmill No. 1) to <1 mg/kg (underneath Sawmill No. 1). TPH as motor oil concentrations ranged from 16,000 mg/kg (southwest end of Sawmill No. 1) to <2 mg/kg (underneath Sawmill No. 1). TRC concluded that elevated levels of petroleum hydrocarbons could leach from soils into surface water, but the magnitude would likely be minimal due to the presence of the concrete foundation. Therefore, TRC recommended leaving the building floor intact to prevent contact of soils with the surface water. If future development activities on the Site require the removal of the concrete foundation, then further investigation of the soil in selected areas is necessary to delineate the extent of soil contamination and determine if soil excavation is required. Additionally, TRC recommended additional sampling in the area of the uncovered boring (located along the southwest wall of the former Sawmill) in order to determine the extents of impacts to the soil and to accurately assess the potential for stormwater impacts in this area.

TRC's *Report of Findings Preliminary Investigation Demolition Support Services,* is contained in Appendix D.

### 7.2.2 Log Pond

The Log Pond is located on the southwest portion of Parcel 5 (Figure 3). According to interviews with G-P personnel, historical aerial photograph reviews, and historical Sanborn maps; the Log Pond has been on the G-P facility since its inception. Based on historical Sanborn maps the shape and size of the Log Pond has changed several times over the year. Based on the earliest Sanborn maps, it appears that portions of the eastern boundary of the Log Pond have been filled.

The pond was previously used as a log pond and is currently used as a source of cooling water for the power plant. Review of site drainage maps indicate that the City of Fort Bragg storm drains empty into the Log Pond. Figure 6.2 shows the facility drainage system. Additionally, the Log Pond is part of the treatment process for the "scrubber" effluent. The scrubber effluent is pumped to a settling pond (located in Parcel 7), it is then pumped into an aeration pond, then to the fire pond, which then drains to the Log Pond. According to site interviews and agency documents, the scrubber effluent contains detectable levels of cyanide.

### 7.2.3 Old Diesel Dispenser Concrete Pad

During site reconnaissance activities a concrete pad was observed on the northwest corner of the Mobile Equipment Shop (Figure 7.1). According to site personnel, the pad formerly contained a diesel fuel dispenser. No facility personnel present during the site inspection could recollect where the diesel came from, how long the dispenser was in operation, or when it was removed. No staining was observed on the concrete pad during sire reconnaissance activities. Additionally, no records of the diesel dispenser were found during site or agency record reviews.

### 7.2.4 Underground Lines to Fuel Dispenser Building

During the site inspection a pipe stub-up was observed at the northwest corner of the Mobile Equipment Shop location. From the stub-up the pipes continued, above-ground, into the Mobile Equipment Shop. An additional pipe stub-up, with piping connected to the ASTs, was observed at the Fuel Storage and Dispenser Building.

According to Mr. Heitmeyer, the underground lines emanate from the Fuel Storage and Dispenser Building, and continue across the yard to the Mobile Equipment Shop (Figure 7.1). The pipes provide fuel for the Mobile Equipment Shop operations. Mr. Heitmeyer also indicated that the pipes were double contained and were connected to a leak detection system.

### 7.2.5 Area West of Mobile Equipment Shop

During an interview conducted as part of site reconnaissance activities, Mr. Richard Benedetti stated he recollected some minor petroleum hydrocarbon spills occurring in the area west of the Mobile Equipment Shop (Figure 7.1). During historical aerial photograph reviews and the site visit no visual evidence of any spills was observed.

### 7.2.6 Transformer Pad

The transformer pad is located on the northeast portion of Parcel 5 (Figure 7.1). The concrete pad is approximately 20-feet by 60-feet and has an 8 foot high painted wood fence. The first evidence of the transformer pad was located on the historic Sanborn map from 1941. The previous Sanborn map (1919) does not show the pad. According to Mr. Heitmeyer all transformers currently on the pad are PCB free.

### 7.2.7 Possible AST Site

During the site visit, Mr. Heitmeyer stated that he recollected a diesel AST previously in the area west of the Mobile Equipment Shop (Figure 7.1). During site reconnaissance activities a historical aerial photograph of the facility was reviewed, an AST was observed in that location. According to facility personnel the photograph was from the late 1970s or early 1980s. Additionally, review of previous facility Spill Prevention, Control, and Countermeasure Plans indicates that an AST was present at that location. No additional information regarding the AST was available in the SPCC.

### 7.2.8 Washdown Building

The Washdown Building, located on the southeast portion of Parcel 5, is an approximately 80-foot by 30-foot structure (Figure 7.1). According to Mr. Doug Heitmeyer, the building was constructed in the late 1980s or early 1990s. The structure consists of concrete flooring with 2-foot high concrete berms on the south side, a steel frame with corrugated metal siding, and one painted wood wall in the rear. The structure has three walls with the front open to allow vehicle access. The north end of the structure consists of a closed room that contains the water treatment system. Figure 7.2 shows a detail of the inside of the Washdown Building.

The open inside portion of the structure is divided into two areas. These areas are used to clean facility vehicles. The area is divided into two equal parts with a 6-inch concrete berm in between. The area to the south was for cold water cleaning and the area to the north for steam cleaning. To the rear of each cleaning area are two concrete sumps. The sumps lead to a concrete sump which runs along the rear of the building. During the site visit a mound of soil was observed in the northern steam clean area. The soil was darkly discolored in some areas and a sheen in the water was observed in the water surrounding the mound. The observed dark discoloration and sheen in the water suggests the mound

of soil is impacted with petroleum hydrocarbons. According to G-P personnel, the soil was accumulated from the equipment clean-up activities which occurred in the building.

The water treatment room, located on the north end of the structure contains a closed loop water treatment system. Water from cleaning operations collects in the rear sump and is then pumped into to a 5,000-gallon above-ground tank, located north of the Washdown Building. Water is then pumped from the 5,000-gallon tank into the treatment system room. The treatment system consists of a settling tank, an oil/water separator, and a reverse osmosis system. Recovered oil is removed and disposed of off-site. Once treated the water is reused for cleaning operations. Six 55-gallon steel and plastic containers were observed inside the water treatment room during site reconnaissance activities. Two steel drums contained used oil filters, 1 steel drum was unmarked, and three plastic containers were also unmarked. During the site visit, surface staining was observed outside the water treatment room, near the 5,000-gallon water treatment tank.

During the interior inspection of the Washdown building, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Additionally, due to the date of construction (after 1978), the Site building probably does not contain areas with lead-based paints. The U.S. Consumer Protection Safety Commission banned lead-based paints in 1978. No paint or ACM samples were collected or analyzed.

### 7.2.9 Tire Shop Building

The Tire Shop Building, located north of the Mobile Equipment Shop, is an approximately 50- foot by 40-foot building (Figure 7.1). According to Mr. Doug Heitmeyer, the building was constructed in the late 1980's to early 1990s. The structure consists of a concrete flooring, painted wood walls and roof, and has two large corrugated metal doors to allow vehicle access. According to Mr. Heitmeyer, the inside is mainly used as tire storage and as a tire repair shop.

During the interior inspection of the Tire Shop building, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Additionally, due to the date of construction (after 1978), the Site building probably does not contain areas with lead-based paints. The U.S. Consumer Protection Safety Commission banned lead-based paints in 1978. No paint samples were collected or analyzed.

Review of historical aerial photographs (1963 through 1982) indicate that a different structure previously occupied the area which is now the Tire Shop Building. G-P personnel on site during the site visit had no knowledge of what the previous structure was used for. Additionally, no records regarding the previous structure were found during review of historical documents.

### 7.2.10 Mobile Equipment Shop

The Mobile Equipment Shop, located on the southeast portion of Parcel 5, is an approximately 250-foot by 70-foot structure (Figure 7.1). The structure was built in the late 1940s and is constructed with painted wood and contains a concrete floor. Due to the date of construction (prior to 1964), the building may contain areas with lead-based paints. No paint samples were collected or analyzed. Figure 7.2 presents a detail of the inside of the Mobile Equipment Shop.

The building has eight corrugated metal role up doors four on the west side, three on the east side, and one on the south side. According to Mr. Heitmeyer, the building was constructed in the late 1940s and he does not know when the concrete floor was poured. Throughout the Mobile Equipment Shed, piping with insulated wrap was observed running along the walls. The piping continued outside the Mobile Equipment Shed, above ground across Parcel 5, toward the north. According the Mr. Heitmeyer the pipes are steam pipes. The insulation covering the pipes is suspect ACM. The east side of the Mobile Equipment Shop has two levels. The lower level contains three rooms designated equipment rooms, two metal shop rooms, a lunch room, and a restroom. The equipment rooms contain used tractor and automobile parts, generators, car batteries, paints, and propane tanks. The upper level of the eastern end of the building contains an office and an open area. The office area contained floor tiles which may contain suspect ACM.

The northern portion of the building contains a room used primarily for unused filters and parts storage. Piping from the underground lines (which connect to the Fuel Storage and Dispenser Building) stub-up outside of the northwest corner and then enter the building. The pipes then connect to an oil/fuel dispenser located adjacent to the paint storage room. North of the oil/fuel dispenser, located outside of the main building is a room containing an air compressor. East of the air compressor room is a pump and sump.

East of the pump and sump is the “north shed”. The “north shed” has a metal grate floor on top of a concrete lined basin which provides secondary containment for chemical storage. The basin is approximately ½ foot deep at the center with sloped sides. Areas of oil staining were observed in the concrete basin. During the site visit, four 275-gallon ASTs were observed inside the shed: one anti-freeze AST, one gear lube AST, one transmission fluid AST, and one hydraulic fluid AST. Additionally, the shed contained twenty-two plastic and steel 55-gallon drums containing gear lube oil, heavy duty grease, motor oil, used oil filters, sorbent waste, used oil, anti-freeze, and lube oil. The “north shed” is accessible from the inside of the Mobile Equipment Shop.

South of the north shed is the used oil change “pit”. The “pit” is approximately 60-feet long by 7-feet deep and 5-feet across. The top is covered by metal grate. Below the “pit” is a rectangular concrete trench, also covered by metal grate. According to Mr. Heitmeyer the *trench* is a catch basin used to collect used oil. During the site visit, hydrocarbon impacted sludge was observed inside the catch basin. South of the oil change pit, an area covered with wood planks was observed in the concrete flooring.

According to Hugo Esquivel, a G-P mechanic, the wood planks cover a 5-foot deep concrete lined pit.

The majority of the western and southwest portions of the Mobile Equipment Shop are used for vehicle maintenance. Several areas of staining were observed throughout the maintenance area (Figure 7.2). Additionally, during the site visit generators, used car batteries, a 300-gallon used antifreeze tank, 2 spill control pallets containing used oil, tractor parts, metal sheds containing paints, basins to drain oil filters, one mobile oil filtration system, one parts washer unit, and open pans containing used oil were observed in the maintenance area.

On the southwest portion of the Mobile Equipment Shop is the "west shed". The "west shed" has a metal grate floor on top of a concrete *basin* to provide secondary containment for chemical storage. The basin is approximately ½ foot deep at the center with sloped sides. Areas of oil staining were observed in the concrete basin. During the site visit, four 27- gallon ASTs were observed inside the shed: three ASTs for hydraulic fluid and one transmission fluid AST. Two of the hydraulic fluid ASTs are used as a filtration system to recycle used hydraulic fluid. Additionally, the shed contained five plastic and steel 55-gallon containers containing gear lube, used oil, waste paint related material, used oil filters, lube oil. Two open 55-gallon drums cut in half containing used oil, oil stained cardboard, oil stained spill pads and booms were also observed in the west shed. The "west shed" is accessible from the inside of the Mobile Equipment Shop.

Outside of the south end of the Mobile Equipment Shop a concrete lined pit covered with a perforated steel plate was observed. The pit contained water and sludge, and according to Mr. Heitmeyer, the sludge has to be removed periodically. Additionally, located along the outside southeast corner, a 300-gallon plastic tote bin containing soap was observed.

### 7.2.11 Fuel Storage and Dispenser Building

The Fuel Storage and Dispenser Building, located in the southeast portion of Parcel 5, is an approximately 45-foot by 120-foot structure. According to Mr. Heitmeyer, the Fuel Storage and Dispenser Building was built in the late 1980s to early 1990s. The structure consists of a steel frame with corrugated metal sides. The building is approximately 25 feet high and is open ended to allow vehicle access to the four dispenser islands. A 1,150-gallon propane tank is located to the east of the structure. Figure 7.3 presents a detail of the Fuel Storage and Dispenser Building.

The western portion of the Fuel Storage and Dispenser Building contains 4 ASTs: a 20,000-gallon diesel fuel AST, 12,000-gallon unleaded gasoline AST, 7,000-gallon lube oil AST, and 4,000-gallon used oil AST. The 4 ASTs are contained within a 4-foot deep *concrete* containment berm (2 feet of the berm extends above the ground surface). Piping from the ASTs to the 4 dispenser islands is contained within a concrete lined trench covered with metal grating. Piping, located near the northwest corner of the structure, extends from the used oil tank and lube oil tank and continues underground to

the Mobile Equipment Shop. An additional underground trench was observed extending from the Fuel Storage and Dispenser Building to the Washdown Building. According to Mr. Heitmeyer the trench is for compressed air.

In the course of the site visit, possible petroleum hydrocarbon impacted sludge was observed within the dispenser island concrete trench. Additionally, staining was observed near the ASTs within the containment berm.

During the interior inspection of the Fuel Storage and Dispenser Building, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. No suspect asbestos-containing materials were observed during the interior inspection. Additionally, due to the date of construction (after 1978), the Site building probably does not contain areas with lead-based paints. The U.S. Consumer Protection Safety Commission banned lead-based paints in 1978. No paint samples were collected or analyzed

### 7.2.12 Office Buildings

The Office Buildings are located on the southeast portion of Parcel 5, along Highway One. Two buildings occupy the area: one building is approximately 100 feet by 50 feet and the other is approximately 50 feet by 25 feet. Both structures are of painted wood construction. According to review of historic aerial photographs, the larger structure was built in the late 1950s or early 1960s. The smaller structure was built in the late 1960s or early 1970s. According to Mr. Heitmeyer, the office buildings were previously used by the Forestry Service and are currently leased by the Mendocino Coast Hospital District. Due to the date of construction the buildings potentially contain lead based paint and ACM.

### 7.2.13 Service Station

On the western portion of Parcel 5, located at 105 South Main Street, is the Walsh Oil One Stop Service Station. According to the Laco Associates Report, *Supplemental Plume Delineation Workplan,* dated February 26, 2001, Walsh Oil leased the site from Georgia Pacific in 1981. According to Laco Associates, records from the Mendocino County Health Department indicate that the USTs were installed on the site in 1960. Review of an aerial photograph from 1963 confirms that there was a structure present at this location.

According to Laco Associates, one 550-gallon used oil UST was removed in 1985 and in May 1998 three gasoline USTs were removed from the site along with product piping. All tanks were of single wall construction. Approximately 380 cubic yards of contaminated soil was over-excavated and removed from the site, and stockpiled on Georgia-Pacific Property. The soil was placed on an aeration cell consisting of 10 mil plastic. The soil stockpile was sampled on 7/01/98 and 8/24/98. During the August 1998 sampling event, TPH-G, benzene, and MTBE concentrations were below laboratory

detection limits. The soil stockpile was subsequently disposed of as a non-hazardous material. Three new USTs were installed on site in the area of the former USTs.

At the request of the Regional Water Quality Control Board, eight soil borings were advanced on site and groundwater and soil samples were collected in April 2000. Soil boring B1-00 (10ft) contained the highest concentrations of TPH-G and benzene at 3100 µg/g, 6.1 µg/g, respectively. MTBE was detected in soil boring B1-00 (5ft) at concentrations of 0.15 µg/g. Groundwater collected from B1-00 contained the highest concentrations of TPH-G (60,000 µg/L) and MTBE (110 µg/L). The highest concentration of benzene (34 µg/L) was collected from boring B7-00. Additionally, three monitoring wells were also installed on site in April 2000. Results of the investigation are contained in Appendix D.

In January 2001, Laco Associates performed a Sensitive Receptor Survey (SRS) of the site. As part of the SRS, water samples were collected from the Georgia-Pacific Site from one of the five on-site irrigation wells (IW-1), small (fire) pond and the mill pond. Additionally, a sample was collected from the small (fire) pond substrate. Samples were analyzed for TPH-G, BTEX, and MTBE. Concentrations of TPH-G, MTBE, and BTEX were below the laboratory detection limits in samples collected from the mill pond and IW-1. The groundwater sample collected from the small ( fire) pond contained concentrations of MTBE (5.8 µg/L). The substrate sample collected from the small (fire) pond contained concentrations of benzene (0.014 µg/g) (Laco, January 2001).

The on-site monitoring wells are monitored and sampled on a quarterly basis. Groundwater samples are analyzed for TPH as gasoline, BTEX, and MTBE. The most recent sampling event, conducted by Laco Associates, occurred on April 16, 2002. The groundwater flow direction is historically to the southwest with a slope of 0.29 percent (Laco, July 2002). Benzene and MTBE concentrations were below laboratory detection limits in all three wells. TPH as gasoline concentrations ranged from 220 micrograms per liter (µg/L) (MW-3) to concentrations below the laboratory detection limit of <50 µg/L (MW-2). The Regional Water Quality Control Board – North Coast Region typically enforces Maximum Contaminant Level (MCLs) concentrations as clean-up goals for LUST sites in this region.

## 7.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. The key findings from this review are provided in the following section.

1952 and 1957

In the 1952 and 1957 aerial photographs the small pond, the mobile equipment shop, sawmill No. 1, and log pond are all visible. The eastern end of the log pond extends further north than it does today. There are no structures around the mobile equipment

shop. There appears to be a structure in the area of the service station. No stains or other evidence of contamination was noted.

1963, 1966, and 1973

In the 1963, 1966, and 1973 aerial photos, Parcel 5 appears very similar to the previous years of coverage. The small pond, the mobile equipment shop, sawmill No. 1, and log pond are all still visible. The eastern end of the log pond still extends further north than it does today. In the 1963, 1966, and 1973 photograph a structure appears in the current location of the Tire Shop. The structure is larger and shaped differently that the current tire shop. In the 1963 photograph the larger office building appears along Highway One. In the 1973 photograph the smaller office building is present. No stains or other evidence of contamination was noted.

1982

Parcel 5 in the 1982 aerial photos appears much as it did in the previous photos. The small pond, the mobile equipment shop, sawmill No. 1, and log pond are all still visible. The eastern end of the log pond has been filled in, and it appears as it does today. The structure in the place of the tire shop is still visible. No stains or other evidence of contamination was noted.

### 7.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received four Sanborn maps, from the years 1898, 1909, 1919, and 1941,which contained coverage of Parcel 5. The key findings from the review of each year of Sanborn map coverage is provided in the following section. Copies of Sanborn Maps are included in Appendix E.

1898

In the 1898 Sanborn map, sawmill No. 1 and mill pond are present in the Parcel 5 area. The mill pond is larger toward the east and northeast. To the south of the sawmill is Alder Creek. Railroad lines cut across the site north to south along the eastern portion of Parcel 5 and east to west near the sawmill. The only structures east of the sawmill are a boarding house, machine shop, blacksmith and carpentry shop.

Identified areas of the Sawmill include three engines, 20,000-gallon water tank, and two boiler tanks.

1909

Parcel 5 in the 1909 Sanborn map appears to be very similar to Parcel 5 in the 1898 Sanborn map. The eastern boundary of the mill pond appears to have gotten smaller. The boarding house appears to be the same. The blacksmith, machine shop, and

carpentry shop are now three separate buildings as opposed to two building in the previous Sanborn. The sawmill and railroad lines appear much as they appeared in 1889. Alder Creek in no longer present. A shingle mill shows up for the first time in the 1909 Sanborn map. To the east of the shingle mill is an area marked as "open refuse fire."

1919

Parcel 5 in the 1919 Sanborn appears similar as it did in the 1909 Sanborn. The mill pond, boarding house, machine shop, carpentry shop, blacksmith shop, sawmill, shingle mill, and rail lines appear the same. The open refuse fire is still to the east of the shingle mill. Another area marked open refuse fire is now south of the sawmill. A storage building now appears to the east of the mill pond. There is an "oil house" to the west of the boarding house. A structure marked "coal storage" is located northwest of the machine shop.

1941

Several new features are found in Parcel 5 on the 1941 Sanborn map. The new features include the small pond, transformer pad, tool shop, garage, and the electrician shop. Several new features were identified around the sawmill including: board plant, dry kiln, boiler house, scrap wood storage, hoist engine, and compressor house. The rail lines, open refuse fire near the sawmill, the sawmill, boarding house, blacksmith, oil house, and machine shop all appear the same.

## 7.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. In the 1943 USGS map the small mill pond is not present but it does appear in the 1960 map.

## 7.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. The following presents our findings:

Beacon No. 3493 210 Main Street

Former Beacon Station No. 3493 is located on the southeast corner of South Main Street and Madrone Avenue in Fort Bragg, California. According to Delta Environmental's *Monitoring Well Installation Work Plan,* Ultramar Inc. has leased the property from the Harvey Trust since 1967. Two 10,000 gallon USTs were installed in 1970 and one 6,000 gallon UST was installed in 1980. Two on-site monitoring wells (MW-1 and MW-2) were installed in the tank cavity area in May 1988. Three offsite monitoring wells (MW-1A, MW-2A, and MW-3) were installed in March 1990, by International Technology Corporation for the California Department of Transportation (CalTrans).

These wells were installed due to the detection of hydrocarbons in a storm drain trench dug by CalTrans along South Main Street. In November 1990 MW-2 was destroyed. In July 1991 four additional wells were installed. MW-4 and 5 were placed on-site, while MW-3 and 6 were installed offsite.

In June 1997 the three USTs and all associated product dispenser lines were removed. MW-1 was destroyed during tank removal activities. Two wells (MW-W and MW-E) were installed as groundwater recovery wells. A groundwater extraction trench was installed along the western boundary of the site in December 1998. In January 1999, monitoring wells MW-1A, MW-2A, and MW-3A were abandoned. In October 1999, due to low levels of hydrocarbons in the groundwater, the extraction trench and all associated equipment was removed.

In February 2002, Horizon Environmental advanced 6 direct push borings, to 8 feet below grade, in order to collect soil and groundwater samples to evaluate the lateral extent of gasoline-range hydrocarbons and MTBE downgradient and cross-gradient of the site. Concentrations of TPH-G, BTEX, and MTBE were not detected in soil and groundwater samples collected from borings GP-1 and GP-3 located on the west side of South Main, or GP-5 and GP-6 located on the east side of South Main. Concentrations of TPH-G, benzene, ethylbenzene, total xylenes were detected in the soil and groundwater samples collected from GP-2 (west side of South Main) and GP-4 (East side of South Main). Concentrations of toluene were also detected in the groundwater from GP-2 and GP-4 (Horizon, May 2002).

Currently there are seven on-site wells and two offsite wells which are sampled on a quarterly basis. According to the most recent sampling event, conducted on June 25, 2002, the groundwater gradient was to the southwest at an average rate of 0.02 feet/feet. During the monitoring event, six of the nine wells were sampled and analyzed for TPH-G, BTEX, and MTBE. All analyte concentrations were below laboratory detection limits for all samples collected. (Horizon, August 2002)

<u>One Stop Shop 105 South Main Street</u>

Files regarding the One Stop Shop, located at 105 South Main Street, were reviewed at the Regional Water Quality Control Board – North Coast Region. All findings were previously discussed in Section 7.2.13.

## 7.7 Site Records Review

During site reconnaissance activities conducted for Parcel 5, site records were reviewed. During the site records review the Spill Prevention, Control, and Countermeasure Plan (SPCC) for the Fort Bragg Facility was examined. The SPCC was originally prepared in 1993 with revisions in 1997, 1998, and 1999. An Operational Facility Diagram, showing USTs and ASTs locations, was included in Appendix B of the SPCC document. The diagram showed the presence of two ASTs in the vicinity of the Mobile Equipment Shop.

One AST was located in the area west of the Mobile Equipment Shop and one was located on the northwest corner. The diagram had been updated, during one of the SPCC revisions, to represent the removal of the ASTs. No records of the AST removals where found at the Site, RWQCB, or the Health Department.

A Transformers Inspection and Maintenance Log was also examined during the site records reviewed. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the facility. Although the log does not specify the exact location of each transformer it does give a general location. According to the Maintenance log there were two pad transformers located in the vicinity of Sawmill No. 1 as of 1984.

## 7.8 Electrical Transformers

During site reconnaissance activities a visual survey and historical records search was conducted on Parcel 5 for the presence of electrical transformers. As described in Section 3.2.6, a transformer pad is located on the northeast portion of Parcel 5 (Figure 7.1). The first evidence of the transformer pad was located on the historic Sanborn map from 1941. The previous Sanborn map (1919) does not show the pad. Additionally, an overhead transformer was observed near the office buildings, east of the Fuel Storage and Dispenser Building. According to Mr. Heitmeyer all transformers currently on the facility are PCB free.

Additionally, a Transformers Inspection and Maintenance Log was reviewed. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the facility. Although the log does not specify the exact location of each transformer it does give a general location. According to the Maintenance log there were two pad transformers located in the vicinity of Sawmill No. 1 as of 1984.

## 7.9 Suspected Asbestos Containing Materials

During internal inspections of the buildings present on Parcel 5, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. The following areas were identified to contain suspect ACM:

- Floor tiles in Mobile Equipment Shop
- Steam Line insulation
- Office buildings located along Highway One

## 7.10 Lead Based Paint

A preliminary visual lead-based paint screening survey was conducted of the structures located on Parcel 5. Due to the date of their construction the Mobile Equipment Shop

(constructed in the late 1940s) and the office buildings (constructed between the late 1950s and the early 1970s) were identified to potentially contain lead based paint.

## 7.11 Conclusions and Recommendations

### 7.11.1 Summary of Parcel 5 Findings

During site reconnaissance activities of Parcel 5 for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 5:

- Sawmill No. 1 was demolished in 1998. TRC performed a preliminary investigation to evaluate coatings on selected buildings and to determine if contaminants associated with prior Site operations are present in the subsurface soils in the area. The lead survey report found that paint chips and debris generated during building demolition were not likely to contain hazardous levels of lead. No soil samples analyzed contained detectable levels of PCBs. Elevated concentration of TPH as diesel and TPH as motor oil were found in soils under the concrete foundation of Sawmill No. 1 and one uncovered boring southwest of Sawmill No. 1. TRC recommended leaving the building floor intact to prevent contact of soils with the surface water and further investigation of the area southwest of Sawmill No. 1.

- The Log Pond is used as part of the treatment process for the scrubber effluent. According to plant personnel interviews and agency documents the scrubber effluent contains detectable concentrations of cyanide. Areas in the eastern and western portion of the pond appear to have been filled over time.

- According to G-P personnel, a concrete pad observed on the northwest corner of the Mobile Equipment Shop, was once a diesel dispenser.

- Underground pipes, which supply fuel for the Mobile Equipment Shop, are located to the west of the Mobile Equipment Shop and connect to the Fuel Storage and Dispenser Building. The underground pipes are double contained and are connected to a fuel leak detection system.

- According to G-P personnel a diesel AST was located in the area west of the Mobile Equipment Shop. Additionally, plant personnel indicated that historically some minor petroleum hydrocarbon spills may have occurred in the same area.

- A transformer pad was observed in the area of the small pond and an overhead transformer was observed east of the Fuel Storage and Dispenser Building.

- Review of historical aerial photographs indicated that a different structure previously occupied the area which is now the Tire Shop Building.

- A mound of soil was observed within the Washdown Building. The soil has since been removed from the site. Additionally, sludge was observed within the sumps and concrete trench behind the structure. Some minor soil staining was observed in the vicinity of the 5,000-gallon water treatment AST.

- Sludge was observed within the dispenser island concrete trenches in the Fuel Storage and Dispenser Building.

- The Mobile Equipment Shop was constructed in the late 1940s, but G-P personnel were unsure as to the date the concrete floor was poured. Suspected ACM was observed in steam pipes insulation and floor tiles. Due to the date of construction the building may contain lead based paint. Sludge was observed in the oil change pit and another pit located outside on the south end of the building. A pit covered by large wood planks is located in the northwest portion of the building. Staining was observed on the concrete floor in the north shed, west shed, and west and southwest portion of the structure.

- The offices located along Highway One were constructed between the late 1950s and the early 1970s and potentially contain ACM and lead based paints.

- The Walsh Oil One Stop Service Station, located at 105 South Main Street, has been in operation since the early 1960s. Three monitoring wells are currently on-site and are sampled on a quarterly basis. The groundwater flow is historically to the southwest. Benzene and MTBE concentrations are below laboratory detection limits. The highest concentration of TPH as gasoline is 220 µg/L (MW-3). The Regional Water Quality Control Board – North Coast Region typically enforces Maximum Contaminant Level (MCLs) concentrations as clean-up goals for LUST sites in this region. The MCL for TPH-G is 500 ppb to 1,000 ppb, per the San Francisco Bay Basin Plan.

- Sanborn Maps identified an area to the east of the old shingle mill (east of the Log Pond) as "open refuse fire" and an area to the west of the old boarding house as an oil house.

### 7.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate areas identified in TRC's *Report of Findings Preliminary Investigation Demolition Support Services (southwest of Sawmill No. 1),* for possible diesel and motor oil impacted areas.

- Investigate sediments in the log pond for possible metals and cyanide impacted areas.

- Investigate the following areas for possible petroleum hydrocarbons:
  - Around the underground piping
  - Fuel Storage and Dispenser Building
  - Former diesel dispenser concrete pad
  - 5,000-gallon water treatment AST
  - West of Mobile Equipment Shop
  - West of the old boarding house, marked as an oil house on the Sanborn maps

- Investigate areas surrounding transformer pad and overhead transformer for possible PCBs.

- Characterize soils and sludge in the following areas:
  - Washdown building
  - Mobile Equipment Shop
  - Fuel Storage and Dispenser Building

- Investigate soils around and underneath Mobile Equipment Shop for metals, solvents, and petroleum hydrocarbons.

- Investigate area east of old shingle mill, (south east of the Log Pond) identified as "open refuse fire" on Sanborn maps, for metals and petroleum hydrocarbons.

- Investigate area surrounding Tire Shop for petroleum hydrocarbons.

- Perform survey for ACM on insulation in steam pipes, Mobile Equipment Shop tiles, and office buildings.

- Perform lead based paint survey on Mobile Equipment and office buildings.

- Investigate the soils in the fill area east of the Log Pond.

# 8.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 6

## 8.1 Subject Parcel

The area designated as Parcel 6, Planer Parcel, is an approximately 25-acre plot of land located in the northern portion of the G-P Facility (Figure 2). Parcel 6 was subsequently divided into five areas of interest (6.1 through 6.5) identified during site reconnaissance activities (Figure 8.1). The identified areas of interest in Parcel 6 are designated as Former Cooling Towers Location, Planer Mill No. 2, Lumber Storage, Shipping Office, and Parking Areas.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 8.2 Site Inspection

TRC conducted the physical site inspection of Parcel 6 on November 5 and 19, 2002. Information related to Parcel 6 was obtained through interviews with Mr. Richard Benedetti and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility, and is currently retired. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 8.2.1 Former Cooling Towers Location

The cooling towers for the power house, currently located in Parcel 4 (Power House Parcel) were previously located in the west area of Parcel 6. According to plant personnel, the cooling towers ceased operation at this location and were subsequently demolished in the early 1970s. The former cooling towers location is currently undeveloped and consists of a concrete pad in a gravel area with some vegetation (see Photo 1, Appendix B). During site reconnaissance, surface staining was not observed.

### 8.2.2 Planer Mill No. 2

Aerial photographs indicate the north portion of Planer Mill No. 2 was constructed in the 1950s and the remaining larger section was constructed in the late 1960s to early 1970s. According to plant personnel, Planer Mill No. 2 operated as a plywood plant by Louisiana Pacific until the early 1980s. Shortly thereafter, Georgia Pacific began

operation of Planer Mill No. 2. During plant operations, lumber was stored and processed in the Planer Mill.

The Planer Mill is a wood building, approximately 600 feet by 800 feet, with overhead lighting and concrete and asphalt floor. During the site reconnaissance, cracking in the floor was noted. Some staining was observed on the asphalt floor in the southeast area of the building near the stacker machine.

Hydraulic units are located in the east and west areas of the building. The central area of the building contains parts storage. During site visit, old motors, an air compressor, and pieces of transformers were observed on the ground in this area. Surface staining was observed around the air compressor (see Photo 2, Appendix B). In addition, a large transformer is located in this area (see Photo 3, Appendix B). Review of site records indicate lube oil and hydraulic oil storage in the central area of the building.

Eight empty oil drums were observed outside the central area of the Planer Mill, to the west side. Surface staining was noted on the concrete and soil in this area (see Photo 4, Appendix B).

During the interior inspection of Planer Mill No. 2, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. Building materials are suspect ACM due to the date of construction (early 1960s). In addition, due to the construction date, the building may contain areas with lead based paints.

### 8.2.3 Lumber Storage

The west area and central area of Parcel 6 (east of Planer Mill No. 2) are lumber storage areas. These areas are asphalt paved and undeveloped. According to plant personnel, the asphalt was placed in the late 1980s and the area has consistently been used for lumber storage. During site reconnaissance, surface staining in the lumber storage areas was not observed.

### 8.2.4 Shipping Office

The Shipping Office, located in the east area of Parcel 6, is a small building with a few office rooms and bathrooms (see Photo 5, Appendix B). According to plant personnel, the Shipping Office was constructed in the mid-1990s. During site visit, surface staining was not observed at the Shipping Office area.

Portable building trailers were located at the Shipping Office location from the 1980s to the mid-1990s, prior to its construction. A vehicle maintenance shop was located at the Shipping Office location until the 1980s. Aerial photos indicate the vehicle maintenance shop was constructed in the early 1960s. According to Mr. Heitmeyer, the vehicle maintenance shop serviced highway vehicles (i.e., small trucks, cars).

During interviews with plant personnel, Mr. Heitmeyer recalled a fuel pump in operation at or near the vehicle maintenance shop. Mr. Heitmeyer was unsure of the dates of operation, but recalled the fuel pump existing in the 1970s. Mr. Heitmeyer estimated the location of the fuel pump and fuel storage was northeast of the current Shipping Office (see Photo 6, Appendix B). Review of site documents revealed an undated site map indicating the presence of a 25,000-gallon diesel AST northeast of the vehicle maintenance shop.

#### 8.2.5 Parking Areas

The east end of Parcel 6 is an asphalt vehicle parking area. Review of site documentation, aerial photographs, Sanborn maps, and interviews with plant personnel indicate this area has consistently been utilized for vehicle parking since the late 1950s. No surface staining was observed in the parking areas.

#### 8.2.6 Fill Area West of Log Pond

Review of aerial photographs indicates that the log pond extended further west. The western portion of the Log Pond appears to have been filled in prior to 1973.

### 8.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. The key findings from this review are provided in the following section.

1952

In the 1952 aerial photograph, Parcel 6 remains undeveloped. The log pond extends into the west area of Parcel 6. Vegetation is visible in the central and east areas of the Parcel.

1957, 1963, and 1966

The 1957, 1963, and 1966 aerial photographs show development on Parcel 6. The north section of Planer Mill No. 2 is visible. Two buildings are shown in the central area of Parcel 6. Site documentation indicates one of these building was a lumber storage shed. A parking area is visible in the east area of Parcel 6 in the 1963 and 1966 photos. The 1966 photo shows the vehicle maintenance shop. The log pond and vegetation in the east area appear similar to the 1952 photo.

1973

In the 1973 aerial photograph, Parcel 6 appears similar to the previous years of coverage with further development. The storage shed, the other building north of the storage shed, vehicle maintenance shop, and parking area are shown. In addition, Planar Mill No. 2 is fully constructed as it exists today. The log pond is shown as it exists today. Lumber

storage is evident in the west area of Parcel, west of Planer Mill No. 2. Vegetation in the east area of Parcel 6 has been cleared.

1982 and 1993

In the 1982 and 1993 aerial photograph, Parcel 6 is very similar to the 1973 photo. The building north of the storage shed is no longer visible in the 1982 photograph and the storage shed is no longer visible in the 1993 photograph. A building exists at the vehicle maintenance shop location (current shipping office location).

### 8.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received two Sanborn maps, from the years 1919, and 1941,which contained coverage of Parcel 6. The Sanborn maps contained partial coverage of Parcel 6 that includes only the eastern most area and did not indicate land use. Copies of Sanborn Maps are included in Appendix E.

### 8.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. The 1943 USGS map indicates a railroad spur traversing east/west along the north edge of Parcel 6 and a railroad traversing north/south through Parcel 6. In the 1960 maps, the railroad spur is shown but the north/south railroad is not shown. The 1960 maps indicate the north portion of the Planer Mill No. 2 building and a building in the east portion of Parcel 6. The 1978 map is similar to the 1960 maps, however, additional development on Parcel 6 is indicated. The remaining portion of Planer Mill No. 2 is shown and an additional building to the north and south of Planer Mill No. 2.

### 8.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. The files provided by the RWQCB contained Annual Storm Water Discharge Reports associated with industrial activities. The reports do not contain relevant information in regards to the potential environmental concerns for Parcel 6.

### 8.7 Site Records Review

During the site visit conducted for Parcel 6, on-site records were reviewed for information regarding Parcel 6. The following presents a summary of our findings.

During site reconnaissance activities the Spill Prevention, Control, and Countermeasure Plan (SPCC) for the Fort Bragg Facility was reviewed. The SPCC was originally prepared in 1993 with revisions in 1997, 1998, and 1999. The SPCC indicates four hydraulic oil ASTs on the floor level of Planer Mill No. 2 with capacities of 55, 100, 210, and 250 gallons. The SPCC also indicates a designated hazardous waste storage area

with secondary containment located in the north area of Planer Mill No. 2. Material stored in this area is primarily waste oil, absorbents, used paint thinners, saw grindings, and occasionally transformer oil and asbestos. According to Mr. Heitmeyer, hazardous waste was stored at this location from the early 1990s through 1997. The location is currently used to store emergency response equipment.

## 8.8 Electrical Transformers

During site reconnaissance activities a visual survey and historical records search was conducted on Parcel 6 for the presence of electrical transformers. Transformers were noted at two locations within Parcel 6. As described in Section 8.2.2, a large transformer is located inside Planer Mill No. 2 and some transformer pieces were noted in the same area. In addition, one overhead transformer is located in the southeast area of Parcel 6 (east of the Shipping Office and west of the parking areas). According to Mr. Heitmeyer all transformers currently on the facility are PCB free (containing less than 50 milligrams per kilogram PCBs).

Review of site documentation revealed a map dated 1982 (Fire Protection Piping Plant Layout) indicating overhead transformers north of the former storage shed and northwest of Planer Mill No. 2.

Additionally, a Transformers Inspection and Maintenance Log was reviewed. The maintenance log lists 22 pad and 23 pole mounted transformers located throughout the facility. Although the log does not specify the exact location of each transformer it does give a general location. The maintenance log indicates two ground transformers at Planer Mill No. 2 and one transformer at the highway truck shop (vehicle maintenance shop).

## 8.9 Suspected Asbestos Containing Materials

During internal inspections of the buildings present on Parcel 6, a preliminary visual survey of the readily visible interior construction materials was performed by TRC. The only area identified to contain suspect ACM is Planer Mill No. 2

## 8.10 Lead Based Paint

A preliminary visual lead based paint screening survey was conducted of the structures located on Parcel 6. Due to the date of construction Planer Mill No. 2 was identified to potentially contain lead based paint.

## 8.11 Conclusions and Recommendations

### 8.11.1 Summary of Parcel 6 Findings

During site reconnaissance activities of Parcel 6 for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 6:

- Planer Mill No. 2 was constructed in two parts: the north section in the 1950s and the remaining larger section in the late 1960s to early 1970s. Hydraulic units are located in the east and west areas of the building. Several hydraulic oil ASTs are located throughout the facility. In addition, lube oil and hydraulic oil are stored in the central portion of the facility. Areas of oil storage may be impacted with petroleum hydrocarbons.

- An air compressor is located in the central area of Planer Mill No. 2. Surface staining was evident around the air compressor and soils underneath may be impacted with petroleum hydrocarbons.

- The central area of Planer Mill No. 2 contains parts storage. Old motors and pieces of transformers were observed in this area. This area may be impacted by petroleum hydrocarbons from the motors and PCBs from the transformers (date unknown).

- Empty oil drums are stored outside the central area of Planer Mill No. 2. Surface staining was observed on the concrete and soil in this area. Stained areas may be impacted with petroleum hydrocarbons.

- Review of site documentation revealed a hazardous waste storage room in the northwest corner of Planer Mill No. 2. Materials stored in this area include waste oil, absorbents, used paint thinners, saw grindings, and PCB-contaminated oil and asbestos. According to plant personnel, hazardous waste was stored at that location in the 1990s and the room is currently used to store emergency response equipment. The hazardous waste storage area may be impacted with petroleum hydrocarbons, solvents, and PCBs.

- The Shipping Office was constructed in the mid-1990s. A vehicle maintenance shop was previously located at the current Shipping Office location from the early 1960s until the 1980s. Plant personnel recalled a fuel pump and fuel AST at or near the vehicle maintenance shop. An undated site map discovered during facility records review indicates a 25,000-gallon diesel AST located northeast of the vehicle maintenance shop. Soils in and around the former vehicle maintenance shop and diesel AST may be impacted with petroleum hydrocarbons.

- Vehicle parking is located on the east portion of Parcel 6. Aerial photographs indicate vehicle parking in this area since the late 1950s.

- Electrical transformers were observed in the central area of Planer No. 2 (one large transformer) and one overhead transformer located in the southeast area of Parcel 6 (east of the Shipping Office and west of the parking areas). Review of site documentation indicate overhead transformers were previously located north of the former storage shed and northwest of Planer Mill No. 2 and ground transformers were previously located in the Planer Mill No. 2 and at the vehicle

maintenance shop. Due to the age of the facility, the soil in the vicinity of the transformers may be impacted with PCBs.

- Based on the construction date, Planer Mill No. 2 may contain suspect ACM and lead based paint.

- Western portion of the Log Pond appears to have been filled in. Source of the fill materials is not known

### 8.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate former hazardous waste storage area for petroleum hydrocarbons, solvents, and PCBs.

- Investigate the following areas for possible petroleum hydrocarbons:
  - Hydraulic oil ASTs in Planer Mill No. 2
  - Central area of Planer Mill No. 2 storing air compressor, old motors, lube oil and hydraulic oil
  - Surface staining outside the central area of Planer Mill No. 2
  - Former vehicle maintenance shop location
  - Former diesel AST location

- Investigate soils in the vicinity of transformers for PCBs at the following locations:
  - Central area of Planer Mill No. 2
  - Northwest of Planer Mill No. 2
  - North of former storage shed
  - Southeast area of Parcel 6 (east of Shipping Office and west of parking areas)
  - Former vehicle maintenance shop location

- Perform asbestos and lead based paint survey on Planer Mill No. 2.Invesitigate the soils in the fill area west of the Log Pond.

# 9.0 SITE RECONNAISSANCE ACTIVITIES – PARCEL 7

## 9.1 Subject Parcel

The area designated as Parcel 7, Sawmill No. 2 Parcel, is an approximately 35-acre plot of land located along the southern portion of the G-P Facility (Figure 2). Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 7 was used as log storage and or vacant land until the 1960s. Parcel 7 was subsequently divided into four areas of interest (7.1 through 7.4) identified during site reconnaissance activities (Figure 9.1). The identified areas of interest in Parcel 7 are designated as Sawmill No. 2, South Ponds, Sediment Drying area, and Scale House.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 9.2 Site Inspection

TRC conducted the physical site inspection of Parcel 7 on August 11, 2002, September 12, 2002 and October 16, 2002. Information related to Parcel 7 was obtained through interviews with Mr. Richard Benedetti, Mr. Paul Johnson, and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr. Michael Woody was present to allow access to the Site. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility and is currently retired. Mr. Michael Woody is currently the West Coast Regional Environmental Resources Manager. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 9.2.1 Sawmill No. 2

Sawmill No. 2 was initially constructed in the early 1960s. The initial building occupies the western portion of the Sawmill and contains hydraulic equipment for loading the logs onto the chains, and saws for cutting the logs. The barks and cuttings from the Sawmill operations are sent to the Power House Parcel (Parcel 4) through a series of overhead conveyors.

According to personnel interviews, and review of aerial photographs, the southern portions of the building were constructed in the 1980s. The building and the log deck areas are paved with asphalt and concrete. East of the Sawmill No. 2 is a sorter building which is used for sorting the lumber from Sawmill No. 2.

During the site visit, on the western end of the Sawmill, a stockpile of soil was observed with an estimated volume of 100 cubic yards. According to plant personnel, this stockpile was generated during removal of fuel tank(s), and has been stockpiled on site. No analytical data was available for the stockpile.

Further to the south, on the western side of the Sawmill, is an oil storage house and a compressor. The oil storage house contained ASTs with hydraulic oil and gear lube oil. Staining was observed on the floor of the oil storage house. Further to the east on the northern side of the Sawmill are two transformer pads. Staining was not observed on the ground adjacent to transformer pads.

Within the Sawmill No. 2 building are two areas of hazardous materials storage. These areas are identified in Figure 9.1. These storage areas contain a variety of solvents, fuels such as gasoline and diesel fuel, waste oil, hydraulic and lube oils, and paints. The concrete flooring in these areas was stained.

Within the Sawmill No. 2 building are several hydraulic oil storage areas adjacent to hydraulic motors that turned the conveyors during plant operations. These oil storage areas and motors are placed in concrete constructed secondary containment. Although some staining is visible in the flooring of the secondary containment areas, it is unlikely for hydraulic oils to have impacted the subsurface soils.

The area between Sawmill No. 2 and sorter building is used for storage of supplies and parking. During site reconnaissance, a transformer was observed within this area. According to plant personnel, the transformer was added after 1989 during construction of the additions to the Sawmill and the Sorter building. A small diesel AST and a TP burner for burning scrap materials was located on the northern part of this area. The diesel AST was removed in the early 1970s. This area also contains a chipper shaker building and an oil/water separator associated with Sorter Building operations. During site reconnaissance no evidence of staining or environmental impacts associated with the Chipper Shaker Building or the oil/water separator were observed. Based on the operation and good housekeeping practices, these areas should not be of environmental concern.

The sorter building is located on the eastern side of Sawmill No. 2 and was constructed in the early 1990s. This building has concrete/asphalt flooring. Three areas of hydraulic oil storage were observed within this building located on the south, central and northern portions. During plant operations, hydraulic oil was used for the hydraulic pumps that move the chains. Staining was observed within the containment areas. In addition, oil stains were observed on the concrete floors of the building along the chains. Due to the nature of the hydraulic oil and the containment system in place, the stained floors should not pose an impact to the underlying soils. However, if the building is to be demolished, the surface of the concrete should be cleaned. This will help control stormwater runoff.

A stacker area is located on the northern end of the sorter building. This area is at the end of the conveyor system that runs north south through the Sorter building. The stacker area is uncovered, and rainwater may wash away some of the oil on the chains.

A wood storage area with a conveyor system is located on the eastern side of the sorter building with a dirt floor. Hydraulic pumps were observed in this area with secondary containment.

Review of historical aerial photographs indicate that prior to construction of Sawmill No. 2, the area was occupied by native vegetation. The area was converted to lumber storage in the late 1950s.

### 9.2.2 South Ponds

There is currently a series of four ponds located on the southern portion of Sawmill No. 2. These ponds consist of Settling Pond, Aeration Pond, and a two Holding Ponds. According to plant personnel, the scrubber effluent from the Power House is pumped to the Settling Pond. Water is then gravity fed to the Aeration Pond where cyanide levels are reduced. From the Aeration Pond, the water flows by gravity to the Settling/Holding Ponds prior to discharge back to the Log Pond. Water from the Settling Ponds is transported through an underground pipe extending from the west side of the west Holding Pond to the southwest side of the Log Pond.

Due to plant operations, there is potential for the sediments in these ponds to have been impacted with cyanides.

According to plant personnel, boiler ash builds up in the Settling Pond and Aeration Pond and is subsequently dredged and allowed to dewater in a holding area to the east.

A 500-gallon diesel AST, a generator, and a pump are located on the northern portion of the Aeration Pond. This pump is used to dewater the ponds or transport between ponds. No staining was observed near the generator or the AST.

### 9.2.3 Sediment Storage

As indicated in section 9.2.2, the sediment removed from the Settling Pond and Aeration Pond is stored in an area northeast of the pond to dry. The runoff from the dredged material is allowed to infiltrate the ground. There is potential for the soils in this area to have been impacted as a result of the runoff from sediment drying. Soil should be tested for possible presence of cyanide.

A wooded area is located further to the east of this area is. Review of historical aerial photographs indicate that this area was wooded until early 1970s when it was converted to lumber storage. In the early 1980s, as the ponds were constructed, the logs were removed and the sediment was allowed to dewater in this areas.

Four groundwater wells are located further to the east, along the current wooded area. Information was not available regarding the depth and year of construction of the wells. During site reconnaissance, one of these wells was hooked up with a pump to supply water to the nursery. The water is transported through an above ground PVC pipe that traverses south to the nursery.

### 9.2.4 Scale House

The Scale House area consists of a scale house building and two scales on the east and west side of the building. Based on review of aerial photographs, the building was constructed in the 1970s. During site reconnaissance, suspect ACM was observed in the flooring of the building. Due to the date of construction, building materials are suspect ACM.

## 9.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, 1982 and 1993. The key findings from this review are provided in the following section.

1952

In the 1952 aerial photographs the majority of Parcel 7 is covered by vegetation. A pond is visible in the existing location of the Aeration Pond. The western portion of Parcel 7 is used for lumber storage. Railroad tracks traverse north/south through the central portion of Parcel 7. A long and narrow building is located along the tracks. No staining or other areas of concern are noted.

1957, 1963

Photographs from 1957 and 1963 indicate that areas west of the railroad tracks have been cleared from vegetation and are used for lumber storage. Portions of the western and northern areas of the Sawmill No. 2 building are visible in the 1963 aerial photograph. The Aeration pond is still visible in these aerial photos. The areas currently occupied by other holding ponds are covered by vegetation.

1966, 1973

The 1966 aerial photograph shows extension of a railroad line to the eastern most corner of the Sawmill. Lumber is stored to the south of the Sawmill adjacent to the current location of the ponds. The 1973 indicated buildings in the current location of the Scale House. The South Ponds are visible in the 1973 photo but are smaller than they exist today. The area currently used for sediment drainage has been cleared and is used for umber storage. More of the areas south of the Sawmill are also used for lumber storage.

1982

In the 1982 aerial photo, Parcel 7 appears mostly as it exists today. The photo indicates additions to the south side of the Sawmill and the sorter building to the east of the Sawmill.

1993

The 1993 aerial photograph shows the area as it exists today. The sorter building and the additions to the south side of the Sawmill. The current Settling Pond for the scrubber effluent is not shown in the 1993 photo.

### 9.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received five Sanborn maps, from the years 1898, 1909, 1919, and 1941. The Sanborn maps from 1919 and 1941 contained coverage for Parcel 7. With the exception of showing few railroad tracks traversing north south across this parcel, Sanborn maps do not provide coverage of Parcel 7.

### 9.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. The historical USGS Maps do not show any specific site features related to Parcel 7.

### 9.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. No files pertaining specifically to Parcel 7 were found during this review.

### 9.7 Site Records Review

During the site visit conducted for Parcel 7, on-site records were reviewed for information regarding Parcel 7. No files pertaining specifically to Parcel 7 were found during this review.

### 9.8 Electrical Transformers

During the site visit conducted for Parcel 7, a preliminary visual survey was conducted for the presence of electrical transformers. Electrical transformers were observed in three locations in Parcel 7. In each location, transformers were observed on concrete pads. Two of these locations are north of the Sawmill building. Site interviews indicate that these transformers have been at existing locations since early 1960s. Although no staining was observed in the areas near these transformers, there maybe historical impacts

to nearby soils from these transformers. The transformer located between the Sawmill and the sorter buildings was installed in the early 1990s. Due to the age of this transformer its placement on a concrete slab, it is unlikely for the soils below to have been impacted with PCBs.

## 9.9 Suspected Asbestos Containing Materials

During site reconnaissance conducted for the subject Parcel, a preliminary visual survey of the readily visible construction and insulation materials was performed by TRC. Suspect ACM may be present in the northern and western portion of the Sawmill No. 2 Building and the Scale House. Due to the age of construction of the remaining buildings onsite, it is highly unlikely for ACM to be present.

## 9.10 Lead Based Paint

During the site reconnaissance a preliminary visual lead based paint screening survey was conducted for the subject Parcel. Due to the age of the Sawmill No. 2 building, there is potential for presence of LBP in the building materials

## 9.11 Conclusions and Recommendations

### 9.11.1 Summary of Parcel 7 Findings

During site reconnaissance activities of Parcel 7 for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 7:

- The majority of Parcel 7 was historically either unused vacant land, or used for lumber storage.

- Western most portion of Sawmill No. 2 was constructed in the early 1960's and no changes were made until early 1980s. In the late 1980s, the southern most part of the building was added. In the early 1990s, a sorter building was added south east of the Sawmill No. 2 building**.**

- Two Hazardous materials/waste oil storage locations were observed within the Sawmill No. 2 building. Staining was observed on the ground in these areas.

- Large electrical transformers were observed in two areas north of the Sawmill No. 2 building on a concrete/asphalt pad. According to plant personnel, these transformers have been present since plant construction. There is potential for soil near the transformers to have been impacted with PCBs. An additional transformer was observed in the open area between Sawmill No. 2 and the sorter building. This transformer was installed in the early 1990s on a concrete pad. Due to the age of this

transformer, it is unlikely for the soils in this area to have been impacted from past operations.

- An estimated 100 cubic yard stockpile of soil was observed west of the Sawmill No. 2. Plant personnel indicated that the stockpile was generated during fuel tank removal activities. This stockpile is potentially impacted with petroleum hydrocarbons.

- Hydraulic oil storage areas were observed within the Sawmill No. 2 building and the sorter building. These oil storage areas were secondarily contained and provide hydraulic oil for the conveyors. Although staining was observed on the concrete floor, containment appeared to be in good shape. It is highly unlikely for the soil underneath the containment to have been impacted from site operations.

- According to plant personnel, TP burner and diesel fuel ASTs were historically located between the Sawmill and the Sorter Buildings. There is potential for soil in these areas to have been impacted with TPH and PAHs.

- The scrubber effluent from the Power House (Parcel 4) discharges to the Settling Pond on the south side of Parcel 7. The water from this pond is then discharged to the Aeration Pond. Aeration Pond is connected to two additional ponds and the discharge diverts back to the western end of the Log Pond. There is potential for presence of cyanide in the sediments in the ponds.

- The sediments in the Steeling Pond and Aeration Pond are removed and allowed to dry in a dewatering area, east of the aeration pond. Once dry, the sediments are sent offsite for use as fill in nurseries.

- The eastern most edge of Parcel 7 is a wooded area. Four (4) wells were observed on the western edge of this area. These wells should be properly abandoned to prevent possible migration of surface runoff to the groundwater table.

- The Scale House building and the western portion of the Sawmill No. 2 building contains suspect ACM in the flooring and building materials.

### 9.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations regarding Parcel 7:

- Investigate the soil in the hazardous materials storage areas within Sawmill No. 2 building for presence of solvents, PCBs, and TPH as diesel.
- Investigate the soil in the former diesel AST and TP burner area between the Sawmill and the Sorter Buildings.
- Investigate the surface soil in the areas near transformer pads north of the Sawmill No. 2 for presence of PCBs.
- Collect sediment samples from the ponds for presence of cyanide.
- Abandon the wells observed on the western side of the wooded areas.
- Collect soil samples from the stockpile west of Sawmill No. 2.
- Perform surveys of lead based paint and ACM for the Scale House and the western end of the Sawmill No. 2 building.

# 10.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 8

## 10.1 Subject Parcel

The area designated as Parcel 8, Log Storage Parcel, is an approximately 129-acre plot of land located along the southwestern portion of the G-P Facility (Figure 2). Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 8 was used as log storage. Parcel 8 was subsequently divided into four areas of interest (8.1 through 8.4) identified during site reconnaissance activities (Figure 10.1). The identified areas of interest in Parcel 8 are designated as fueling area for planes (south end of the airstrip), disturbance along coastal region (near cemetery), clinker piles, and the "sheep barn".

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 10.2 Site Inspection

TRC conducted the physical site inspection of Parcel 8 on August 11, 2002, September 12, 2002 and October 16, 2002. Information related to Parcel 8 was obtained through interviews with Mr. Richard Benedetti, Mr. Paul Johnson, and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr. Michael Woody was present to allow access to the Site. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility and is currently retired. Mr. Michael Woody is currently the West Coast Regional Environmental Resources Manager. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 10.2.1 Fueling Area for Planes (South End of Airstrip)

The airstrip 2,000-feet long and stretches across the western portion of Parcel 8. According to Mr. Heitmeyer the airstrip was constructed between 1941 and 1952 and was in operation until the late 1980s. Near the south end of the airstrip is a small 100-foot by 100-foot area which was used as a fueling area for airplanes. According to Mr. Heitmeyer, fueling trucks would transport fuel to the planes and re-fill them on the pad. No evidence of hydrocarbon impacted soil or staining was observed during site reconnaissance activities, however, there was potential for releases to the soil during plane fueling operations. This area should be investigated to account for such possible releases.

### 10.2.2 Disturbance Along Coastal Areas (Near Cemetery)

Review of historical aerial photographs, from 1957 to 1973, revealed a large area of disturbed vegetation and soil along the coastal area in the southern portion of Parcel 8. The disturbed area appears to be 600-foot by 400-foot area. The aerial photos depict an access road, which is currently not present, leading down to the beach area below the cemetery. The aerial photos also show the surrounding area to be covered with vegetation. The identified area appears to be undisturbed and re-vegetated in the aerial photo from 1982.

Historical Sanborn maps reviewed of the area, from 1919 and 1941, indicate that there was rail lines and log storage activities in this area. Therefore, there is the potential for abandoned rail lines in Parcel 8.

### 10.2.3 Clinker Piles

Clinkers are lava-like pieces of rock formed as a by-product of the wood burning processes at the power plant. When wood is burned at high temperatures in the power plant, the minerals contained in the wood melt and form together, this process is known as ash fusion. According to Mr. Heitmeyer, for a time, the clinkers generated by the power plant were disposed of on the southwest area of Parcel 8. During the site visit clinker piles were observed in the area designated as 8.3 on Figure 10.1. These piles have since been removed from the Site.

### 10.2.4 Sheep Barn

According to Mr. Heitmeyer and review of aerial photographs, the sheep barn was constructed between 1941 and 1952 and was subsequently demolished in the late 1980s or early 1990s. G-P personnel interviewed during site reconnaissance had no knowledge of the purpose of the sheep barn.

During the site visit, Mr. Benedetti, Mr. Johnson, and Mr. Heitmeyer stated that they had heard of the burial of transformers in the area of the sheep barn. None of the G-P personnel interviewed had actually observed or *participated* in such activities. No evidence of buried transformers of contamination was observed during site reconnaissance activities. These alleged practices should be investigated through conducting a subsurface geophysical survey of the area. Identified subsurface anomalies will be further investigated through installation of excavation trenches.

## 10.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. The key findings from this review are provided in the following section.

1952

In the 1952 aerial photographs the sheep barn and airstrip are visible. The majority of Parcel 8 appears to undisturbed with large areas of vegetation to the northeast of the airstrip. At the time of the photo no wood was stored on Parcel 8. The coastal areas appear to be undisturbed in this photograph. No clinker piles or staining near the plane fueling area are evident.

1957, 1963

In the 1957 and 1963 aerial photographs the sheep barn and airstrip are still visible. A large section of Parcel 8, northwest of the airstrip, *was being* utilized for lumber storage. Several new access roads appear to criss-cross the Parcel. An access road, located to the southeast of the runway, appears to allow access to the beach below. The coastal area near this access road appears disturbed. No clinker piles or staining near the plane fueling area are evident in these photos.

1966, 1973

In the 1966, and 1973 aerial photos, more of Parcel 8 is being utilized for log storage. There are more access roads on the parcel. The coastal area to the southwest of the runway still appears to be disturbed. The sheep barn and airstrip are still evident. No clinker piles or staining near the plane fueling area are evident in these photos.

1982

In the 1982 aerial photos, all of Parcel 8 is being utilized for log storage. The coastal areas appear to be less disturbed. The sheep barn and airstrip are still evident. No clinker piles or staining near the plane fueling area are evident in this photo.

## 10.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received five Sanborn maps, from the years 1898, 1909, 1919, and 1941. The Sanborn maps from 1919 and 1941 contained coverage for Parcel 8. The key findings from the review of each year of Sanborn map coverage is provided in the following section.

1919

According to the 1919 Sanborn map, Parcel 8 was utilized for lumber storage. The map depicts a railroad line, emanating from the north, running across the eastern portion of Parcel 8. The rail line terminates at the cemetery location. The map also depicts several rail lines coming off the main line running west, towards Parcel 10. The Sanborn map also identifies features such as a chemical cart located on the southeast portion of the parcel, and electric crane tracks located in the vicinity of the cemetery.

1942

Parcel 8 on the 1941 Sanborn map appears very similar to the 1919 Sanborn map. The rail lines are still present, but the crane tracks and chemical cart are no longer identified. The Parcel is still designated as an area for log storage.

## 10.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. The historical USGS Map from 1943 shows the "10 Mile Railroad" line went through the G-P Site and terminated in Parcel 8 in the vicinity of the cemetery. Additionally, the airstrip is absent in the 1943 map. In the 1960 Map the railroad line is absent but the airstrip is now present.

## 10.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. No files pertaining specifically to Parcel 8 were found during this review.

## 10.7 Site Records Review

During the site visit conducted for Parcel 8, on-site records were reviewed for information regarding Parcel 8. No files pertaining specifically to Parcel 8 were found during this review.

## 10.8 Electrical Transformers

During the site visit conducted for Parcel 8, a preliminary visual survey was conducted for the presence of electrical transformers. No electrical transformers were observed on Parcel 8. However, during site reconnaissance activities, both Mr. Benedetti and Mr. Heitmeyer stated that they had heard of the burial of transformers in the area of the sheep barn. *Neither of these individuals witnessed or participated in this activity*. No evidence of buried transformers was observed during site reconnaissance activities.

## 10.9 Suspected Asbestos Containing Materials

During the site visit conducted for the subject Parcel, a preliminary visual survey of the readily visible construction and insulation materials was performed by TRC. There are no buildings with suspect ACM on Parcel 8.

## 10.10 Lead Based Paint

During the site reconnaissance a preliminary visual lead based paint screening survey was conducted for the subject Parcel. There area no buildings with suspect lead based paint on Parcel 8.

## 10.11 Conclusions and Recommendations

### 10.11.1 Summary of Parcel 8 Findings

During site reconnaissance activities for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 8:

- The majority of Parcel 8 was used as lumber and storage.
- The airstrip was constructed between 1941 and 1952 and was in operation until the late 1980s. Near the south end of the airstrip is a small 100-foot by 100-foot area which was used as a fueling area for airplanes.
- During review of historical aerial photographs large disturbed areas were noted along the coastline near the cemetery.
- Large clinker piles are located on the western portion of Parcel 8.
- According to plant personnel, based on hearsay, old transformers were allegedly buried in the former Sheep Barn area.

### 10.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate the airstrip fueling area, clinker piles, and the disturbed areas (as identified in historical aerial photographs) for metals, TPH as diesel, and TPH as motor oil. The investigation can be performed by trenching through the identified areas and collecting representative soil samples while logging visual findings.
- Conduct a geophysical survey of the Sheep Barn Area to investigate the presence of alleged transformers. Should the geophysical survey identify subsurface anomalies, they will be investigated further through trenching activities.
- Conduct a geophysical survey and/or potholing of the disturbed areas to identify presence of buried railroad tracks. In the event railroad tracks are found to be present, additional investigation of the soil adjacent to railroad tracks should be conducted for presence of TPH, metals, and PAH's.

# 11.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 9

## 11.1 Subject Parcel

The area designated as Parcel 9, Nursery Parcel, is an approximately 15-acre plot of land located along the southeastern portion of the G-P Facility (Figure 2). Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 9 was not utilized for the sawmill operations until the early 1970s, when a tree Nursery was constructed. Parcel 9 was subsequently divided into two areas of interest (9.1 and 9.2) identified during site reconnaissance activities (Figure 11.1). The identified areas of interest in Parcel 9 are designated as the Tree Nursery Area and the former Scrap Metal Area.

According to G-P personnel Fort Bragg tree nursery operations date back as far as 1922. Early tree growing operations were conducted outdoors on tables. Site Personnel are unsure if the early tree growing operations were conducted on Parcel 9.

The Tree Nursery Area consists of five greenhouses, the main packing shed, chemical storage shed, chemical mixing shed, pump house, a 9,200-gallon holding tank, and a water filtration and purifier system. Based on interviews with G-P personnel and review of historical aerial photographs, two double truss "A" frame greenhouses were constructed in late 1973. In 1975 a third greenhouse was constructed, and then in 1978 the last two greenhouses were built. The greenhouses were approximately 5,000 square feet each. The first three greenhouses had dirt flooring while the two constructed after 1975 had asphalt floors. In 1993 asphalt flooring was installed in the first three greenhouses.

In the late 1970s the asphalt parking area was laid and the main packing shed and chemical mixing shed were constructed. In 1994 the water filtration and purifier system with ozonator was installed. In 1996 the chemical storage shed, pump house, and a 9,200-gallon holding tank with an ozonator were added.

Water from the 9,200-gallon holding tank is pumped to the chemical mixing shed via underground piping. In the chemical mixing shed water is combined with various insecticides and fungicides and pumped to the sprinklers suspended over the tree seedlings. The excess water/chemical mixture from the sprinklers flows on the asphalt floor to the water filtration and purifier system. The water is then pumped through the ozonator filtration system and back to the 9,200-gallon holding tank.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 11.2 Site Inspection

TRC conducted the physical site inspection of Parcel 9 on September 12, 2002 and October 17, 2002. Information related to Parcel 9 was obtained through interviews with Mr. Richard Benedetti and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr.

Richard Benedetti was the Western Group Manager, was a third generation employee at the facility and is currently retired. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 11.2.1 Tree Nursery Area

The Tree Nursery Area is located in the center of Parcel 9 (Figure 11.1). The area consists of five greenhouses, the main packing shed, chemical mixing shed, chemical storage shed, pump house, a 9,200-gallon holding tank, and a water filtration and purifier system.

The five greenhouses are located in the middle of Parcel 9. Each greenhouse consists of metal frames, plastic roofs and asphalt flooring. Inside the greenhouses are rows of tables containing tree seedlings in various stages of development. A system of piping and sprinklers are suspended over the tree seedlings throughout the greenhouses.

The main packing shed, located west of the greenhouses, is an approximately 100-foot by 50-foot structure. According to G-P personnel and review of aerial photographs, the structure was constructed in 1973. The structure consists of corrugated metal sides and roof with a concrete floor. The northern portion of the packing shed contains a large walk-in freezer and an air compressor. The air compressor is located inside a wood shed. Some staining of the concrete floor surrounding the compressor unit was observed. The western portion of the structure contains a lunchroom and office with a second floor area used as storage space. The southern portion of the packing shed contains a large machine used for planting tree seedlings. Some minor staining and cracks in the asphalt were observed in this area.

The chemical mixing shed, located along the eastern side of the greenhouses, is an approximately 20-foot by 10-foot structure. According to G-P personnel the structure was constructed in the early 1970s. The structure consists of painted wood walls and linoleum floors. Inside the structure are containers of fungicide and insecticide and larger plastic containers used for mixing of materials. Along the southern portion of the structure is a pump connected to PVC piping, which exits the structure to the east and feeds the sprinklers in the greenhouses.

The chemical storage shed, the pump house, and the 9,200-gallon holding tank are located to the northeast of the packing shed. According to site interviews the sheds and tank were added to Parcel 9 in 1996. The chemical storage shed is an approximately 10-foot by 20-foot structure, and is of painted wood construction. The shed is used for the storage of fungicides, herbicides, and insecticides used in the tree growing process. A

secondary containment berm was observed on the floor in the southern portion of the structure. The pump house is a 10-foot by 10-foot wood structure located north of the chemical storage shed. Inside the structure is a pump connected to PVC piping which exits the southern portion of the structure and travels underground to the chemical mixing shed. The pump house is connected to the 9,200-gallon poly holding tank, to the north. A PVC pipe connected to the northern side of the tank and travels underground to the filtration and purifier system.

The filtration and purifier system with ozonator, added to Parcel 9 in 1994, is located to the north of the greenhouses. The system consists of an approximately 35-foot by 15-foot concrete berm area containing three poly tanks and the filtration and purifier system with ozonator. The system is housed inside a 15-foot by 10-foot wood structure. The underground PVC pipe from the holding tank connects to the western portion of the system.

### 11.2.2 Former Scrap Metal Area

During site reconnaissance activities, Mr. Heitmeyer stated that, historically, a 50-foot by 100-foot section of Parcel 9 has been used as an area to store scrap metal. The area was located along the northwest portion of Parcel 9, east of the roadway. The scrap metal was removed in 1996.

## 11.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. The key findings from this review are provided in the following section. Historical aerial photographs are presented in Appendix C.

1952, 1957, 1963, 1966

In the 1952, 1957, 1963, and 1966 aerial photographs, Parcel 9 appears relatively undisturbed. In the 1957 photograph the road which defines the western boundary of Parcel 9 first becomes evident.

1973

In the 1973 aerial photographs, near the western road area of Parcel 9, there appears to be an area of disturbance. The area appears to be approximately 50-foot by 150-foot area with little or no vegetation, near the western road. This area of disturbance appears to be in the approximate location identified as the former scrap metal area.

1982

In the 1982 aerial photos, the Nursery buildings are present on Parcel 9.

### 11.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received five Sanborn maps, from the years 1898, 1909, 1919, and 1941. No findings regarding Parcel 9 were observed on the Sanborn Maps.

### 11.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received four maps from the years 1943, 1960 (2), and 1978. No findings regarding Parcel 9 were observed on the Historical USGS Maps.

### 11.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. No files pertaining specifically to Parcel 9 were found during this review.

### 11.7 Site Records Review

During the site visit conducted for Parcel 9, on-site records were reviewed for information regarding Parcel 9. No files pertaining specifically to Parcel 9 were found during this review.

### 11.8 Electrical Transformers

During the site visit conducted for Parcel 9, a preliminary visual survey was conducted for the presence of electrical transformers. No electrical transformers were observed on Parcel 9.

### 11.9 Suspected Asbestos Containing Materials

During the site visit conducted for the subject Parcel, a preliminary visual survey of the readily visible construction and insulation materials was performed by TRC. There are no buildings with suspect ACM on Parcel 9.

### 11.10 Lead Based Paint

A preliminary visual lead-based paint screening survey was conducted of the structures located on Parcel 9. Due to the date of their construction (constructed in the early 1970s) the packing shed and the chemical mixing shed were identified to potentially contain lead based paint.

## 11.11 Conclusions and Recommendations

### 11.11.1 Summary of Parcel 9 Findings

During site reconnaissance activities for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 9:

- Parcel 9 was largely undisturbed by early sawmill activities.
- Three of the five greenhouses had no flooring until 1993.
- Insecticides, herbicides, and fungicides have been stored and used on Parcel 9 since the early 1970s.
- According to G-P personnel, large scrap metal piles have historically been stored on Parcel 9.

### 11.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate under the flooring and around the structures of the following Tree Nursery Areas for insecticides, herbicides, and fungicides:
    - The five greenhouses
    - The main packing shed
    - Chemical storage shed
    - Chemical mixing shed
    - Water filtration and purifier system
    - Pump house and holding tank
- Investigate the pump house area for petroleum hydrocarbons.
- Investigate the Scrap Metal Area for metals, solvents, and petroleum hydrocarbons.
- Perform a LBP survey on main packing shed and mixing shed.

# 12.0 SITE RECONNAISSANCE ACTIVITIES FOR PARCEL 10

## 12.1 Subject Parcel

The area designated as Parcel 10, South Coastal Zone Parcel, is an approximately 58-acre plot of land located along the southwestern portion of the G-P Facility (Figure 2). Historical photos, Sanborn maps, and interviews suggest that the majority of Parcel 10 was not utilized for the sawmill operations. Parcel 10 was subsequently divided into two areas of interest (10.1 and 10.2) identified during site reconnaissance activities (Figure 12.1). The identified areas of interest in Parcel 10 are designated as clinker and ash/scrap piles and the blowhole area.

The history and current conditions of the areas of interest are discussed in further detail in the following sections.

## 12.2 Site Inspection

TRC conducted the physical site inspection of Parcel 10 on August 11, 2002, September 12, 2002 and October 16, 2002. Information related to Parcel 10 was obtained through interviews with Mr. Richard Benedetti, Mr. Paul Johnson, and Mr. Doug Heitmeyer, employees of Georgia Pacific. Mr. Michael Woody was present to allow access to the Site. Mr. Richard Benedetti was the Western Group Manager, was a third generation employee at the facility and is currently retired. Mr. Michael Woody is currently the West Coast Regional Environmental Resources Manager. Mr. Doug Heitmeyer currently serves as the plant Environmental Compliance Manager. He is also a Fort Bragg resident and has been employed by Georgia Pacific, at this site, for approximately 26 years.

Historical information presented in this section was obtained through the interviews of the Georgia Pacific personnel. Areas of interest identified during site inspection work are further described below. Photographs in Appendix B present views of the identified areas of interest.

### 12.2.1 Blowhole Area

The blowhole area is located on the southwest portion of Parcel 10 (Figure 12.1). The blowhole is an area inland of the coastal cliffs which has collapsed leaving a large enclosed hole. A single wall of the enclosed hole is open to the ocean allowing seawater into the hole. The blowhole is approximately 50-foot in diameter and 40-feet deep. Review of historical aerial photographs revealed that for several years large areas near the blowhole were unexplainably disturbed. The disturbed areas are discussed further in Section 12.2.3.

According to Mr. Heitmeyer, disposal of debris and debris burning was conducted in the area of the blowhole. During the site visit discoloration of the soil was observed in and around the cliffs of the blowhole and the identified disturbed area. A small area of melted metal fused to the native rock formation was observed along the cliff line. Additionally, scrap metal, wood pieces, and *clinkers* were observed protruding from the cliff area in and around the blowhole, all along the cliff line of the disturbed area, and on the beach inside the blowhole.

### 12.2.2 Clinker and Ash/Scrap Piles

Clinkers are lava-like pieces of rock formed as a by-product of the wood burning processes at the power plant. When wood is burned at high temperatures in the power plant, the minerals contained in the wood melt and form together, this process is known as ash fusion. According to Mr. Heitmeyer, for a time, the clinkers and ash generated by the power plant were disposed of on the northeast area of Parcel 10. Additionally, Mr. Heitmeyer stated that scrap metal was sometimes disposed of in the clinker piles.

During the site visit clinker piles and scrap metal was observed in the areas designated as 10.1 on Figure 12.1. Several different size and color clinkers were found in the piles present on Parcel 10.

## 12.3 Historical Aerial Photograph Review

Historical aerial photographs were obtained from EDR. TRC received photographs providing coverage of the site from the years 1952, 1957, 1963, 1966, 1973, and 1982. The key findings from this review are provided in the following section. Historical aerial photographs are presented in Appendix C.

1952

In the 1952 aerial photograph, Parcel 10 appears relatively undisturbed.

1957, 1963, 1966, 1973

In the 1957, 1963, 1966 and 1973 aerial photographs the blowhole area of Parcel 10 appears with varying degrees of disturbance. In the 1957 photograph the majority of Parcel 10 appears covered with vegetation. One access road, which forks into two roads, is present leading toward the coast near the blowhole. At the end of the road is a 200-foot by 400-foot area which appears to have no vegetation. In the 1963 photograph the disturbed area now appears to be a 300-foot by 500-foot area. The 1966 photograph shows an additional road forking off the main road. The disturbed area appears to be 400-foot by 800-foot area. The 1973 aerial photograph depicts the largest area of disturbance. The area appears to be approximately 400-foot by 1200-foot area with little or no vegetation.

1982

In the 1982 aerial photos, Parcel 10 appears relatively undisturbed.

## 12.4 Historical Sanborn Maps

Historical Sanborn maps were obtained from EDR. TRC received five Sanborn maps, from the years 1898, 1909, 1919, and 1941. The Sanborn maps from 1919 and 1941 contained coverage for Parcel 10. The key findings from the review of each year of Sanborn map coverage is provided in the following section.

1919, 1941

According to the 1919 and 1941 Sanborn maps, Parcel 10 was relatively undisturbed by the sawmill operations. The maps depict four rail lines converging into two lines leading to the blowhole area. The maps also show seven small undistinguishable structures in the blowhole area.

## 12.5 Historical USGS Maps

Historical USGS Maps were obtained from EDR. TRC received 4 maps from the years 1943, 1960 (2), and 1978. No findings regarding Parcel 10 were observed on the Historical USGS Maps.

## 12.6 Agency File Review

Files were reviewed at the Regional Water Quality Control Board – North Coast Region, in Santa Rosa, California. No files pertaining specifically to Parcel 10 were found during this review.

## 12.7 Site Records Review

During the site visit conducted for Parcel 10, on-site records were reviewed for information regarding Parcel 10. No files pertaining specifically to Parcel 10 were found during this review.

## 12.8 Electrical Transformers

During the site visit conducted for Parcel 10, a preliminary visual survey was conducted for the presence of electrical transformers. No electrical transformers were observed on Parcel 10.

## 12.9 Suspected Asbestos Containing Materials

During the site visit conducted for the subject Parcel, a preliminary visual survey of the readily visible construction and insulation materials was performed by TRC. There are no buildings with suspect ACM on Parcel 10.

## 12.10 Lead Based Paint

During the site reconnaissance a preliminary visual lead based paint screening survey was conducted for the subject Parcel. There area no buildings with suspect lead based paint on Parcel 10.

## 12.11 Conclusions and Recommendations

### 12.11.1 Summary of Parcel 10 Findings

During site reconnaissance activities for the Georgia Pacific California Manufacturing Division facility in Fort Bragg, California, TRC made the following findings regarding Parcel 10:

- Parcel 10 was largely undisturbed by early sawmill activities.
- The presence of debris in the blowhole and along the cliff line, abandoned metal debris, stained cliffs, and a small area of melted debris fused with the native rock formation was observed along the area identified as disturbed in historical aerial photographs.
- Large clinker and ash/scrap piles were observed on the northeast portion of Parcel 10.

### 12.11.2 Recommendations

Based on the information gathered regarding the identified areas of interest, TRC makes the following recommendations:

- Investigate the blowhole area, the clinker and ash/scrap piles, and the disturbed areas (as identified in historical aerial photographs) for metals, TPH as diesel, and TPH as motor oil and PCBs. The investigation can be performed by potholing through the identified area and collecting representative soil samples while logging visual findings.

## 13.0 LIMITATIONS

The operations, facility conditions and other information obtained and utilized in the preparation of this report have been obtained in part from the client, owner, and various government and private agency officials and is assumed by TRC to be complete and correct. It should be noted that this information is subject to professional interpretation which leads to conclusions which may differ based upon opinions specific to individuals.

This report has been presented in accordance with generally accepted environmental assessment practices, for specific application to the property located at the northern portion of 90 West Redwood Avenue, Fort Bragg, California for the specific use of Georgia Pacific. No other warranty, expressed or implied, is made.

The scope of the preliminary visual asbestos and lead-containing paint survey was limited to evaluation of readily exposed and/or accessible materials noted during the visit. TRC notes that no access to the roof or raised ceiling was possible.

There is a distinct possibility that conditions may exist which could not be identified within the scope of this preliminary asbestos and lead paint screening, or which were not apparent during the visit. The study is also limited to the information available from the client at the time it was conducted.

No other warranties are implied or expressed.

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